

BSIR 2016

ANNUAL MEETING



DELEGATE HANDBOOK

15TH-17TH NOVEMBER 2016

MANCHESTER CENTRAL
MANCHESTER



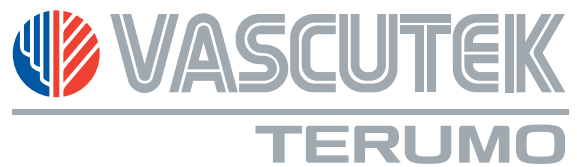
British Society of
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CONTENTS

PAGE	CONTENTS
4	Welcome to BSIR 2016
5	Speaker Instructions
6-7	General Information & Social Events
	WEDNESDAY 4TH NOVEMBER 2015
9	Programme Day 1
10	Scientific Sessions 1 & 2
11	The Graham Plant Proessorship 2016
12	SIRNR Programme
13	Industry Showcases
14	Masterclasses & Workshops
	THURSDAY 5TH NOVEMBER 2015
15	Programme Day 2
16	Scientific Sessions 3 & 4
17	OOH Intervention Snapshot Survey
18	Masterclasses & Workshops
19	Industry Showcases
	FRIDAY 6TH NOVEMBER 2015
20	Programme Day 3
21	Scientific Sessions 5 & 6
22	BSIR/BSIRT Trainee Day Programme
24	BSIR Honorary Fellowships: Professor Mike Dake & Dr Giles Maskell
25	BSIR Gold Medal: Professor Anthony Watkinson
26	Wattie Fletcher Lecture: Dr Richard McWilliams
27	Graham Plant Lecturer
28-29	Faculty Biographies
30-31	Faculty Lists
32-33	Exhibition Plan
34	List of Exhibitors
36-46	Exhibitor Bios
48-49	SIRNR Section
50	BSIR AGM
53-61	BSIR Committee Reports
62	BSIR Membership Form
64-69	BSIR/BSIRT Trainee Day Essay Scholars
70-75	BSIR Abstract & Case Study Review
76	VASBI 2017 - Trainee Day Meeting Announcement
77-100	BSIR Abstracts - Scientific Sessions 1-6
101	VASBI 2017 - Meeting Announcement
102-107	BSIR Scientific & Educational Posters
108	The U Foundation
109	BSIR 2017 - Meeting Announcement
110	BSIR IOUK 2017 - Meeting Announcement

WELCOME TO BSIR 2016

Dear Colleagues,

The theme of this year scientific program continues from the last year's one which entails covering the widest possible aspects of interventional radiology within the limited conference time.

The Scientific Program Committee endeavours to refine the time schedule of this annual meeting to cover almost all aspects of interventional radiology including; oncology intervention, uro-intervention, vascular, hepato-biliary and GI interventions. We paid special attention to cover the educational needs of interventionalists practicing in teaching as well as DG hospitals.

Several outstanding overseas and national speakers will be joining us this year to share their expertise in vascular, non vascular IR and related medical and engineering fields.

Professor Mike Dake will be sharing his views on current practice and future directions in aortic dissection. Professor Jeff Geschwind will join top country oncology interventionists to discuss complex liver oncology interventions. Dr Marc Sapoval and Dr Jafar Golzarian will be sharing their views and experience with robotics and new horizons in embolization techniques.

The National clinical director for diabetes and obesity NHS England, Professor John Valabhji, has agreed to talk about the future directions in diabetic foot care. This will be part of the limb salvage session which also hosts a vascular surgeon and interventional radiologist.

Professor Guang-Zhong Yang, the director of Hamlyn centre for robotics and Deputy Chairman of Institution of Global Health Innovation, will be talking about the latest research in surgical robotics and image guided intervention.

The BSIR will be hosting the NIRUK for the first time in a scientific session which covers various aspects of stroke intervention and stroke service delivery.

Other program highlights include;

- Management of pulmonary embolism; A dedicated session on the promising role of IR in this common medical problem in every practice.
- Occupational hazards and safety issues.
- BSIR Hot Topic debate. This is a very important session with open and brave discussion on the best way forward to evolve our speciality. Dr Nicola Strickland, Dr Tony Nicholson and Dr Alex Chapman will open the debate with the RCR, teaching centres/ IR curriculum and DGH views and priorities respectively.
- M&M and complex case sessions. These popular sessions will provide top education and safety lessons in friendly and enjoyable atmosphere.
- Workshops and Master classes:
Fourteen hours of the program will be secured to deliver practical lessons as well as tips and tricks in various fields of IR including; EVAR planning, thermal ablation, radial / pedal access, paediatric IR, clinical role of IR, musculoskeletal intervention, IR coding, prostate embolization and deep venous stenting intervention and enteral access. More hours will be available for industry show cases where delegates will be exposed to the best practice in the latest and most commonly available technology and equipment.

BSIR annual scientific meeting is an important event that brings interventional radiologists from across the country together; to learn, explore new opportunities and enjoy their times.

We welcome you all again to Manchester for another successful meeting.

Dr Mo Hamady
Chairman of SPC

Dr Hans Ulrich Laasch
Dr Raghuram Lakshminarayan
Dr Nigel Hacking (Past Chair)
Dr Bella Hausen (BSIRT)

SPEAKER INSTRUCTIONS

GENERAL: There is no time in the conference schedule for over-running and the moderators of each session are under strict instructions to finish promptly. A cueing system is in use and if requested by the chairperson please summarize and complete the presentation immediately.

NEW THIS YEAR: HD PRESENTATIONS: All presentations will be in HD . Please note change of format . All Power point presentations should be in a 16 over 9 format. See attached template

FINANCIAL/COMMERCIAL, & MHRA DECLARATIONS: All presentations must include after the title slide a separate slide stating a declaration of any sources of commercial sponsorship, honoraria etc. If there are no relevant sources please include a statement to that effect.

PLEASE NOTE ALL SESSIONS IN THE MAIN AUDITORIUM EXCHANGE AUDITORIUM WILL BE FILMED AND AVAILABLE TO ALL BSIR MEMBERS VIA A SECURE SITE ON THE BSIR WEBSITE AFTER THE MEETING.

If relevant, ie if the paper concerns failure of a device, please include a statement to confirm that this has been reported to the MHRA. In addition, please state if "off label" use of a drug or device is to be discussed in your presentation.

SCIENTIFIC SESSIONS 1-6: Please ensure that the presentation takes less than 8 minutes (you should aim for 6 minutes with 2 minutes for questions!). If you talk for more than 6 minutes you will be interrupted and asked to sum up in 30 seconds to allow time for questions.

PLENARY SESSIONS: Please note the duration of each presentation according to the programme or as indicated by the session chairperson and allow an appropriate period for questions at the end of your talk.

WORKSHOPS/MASTERCLASSES: Please contact meeting@bsir.org for advice (if necessary) on structure.

INTERACTIVE VOTING & FEEDBACK: The plenary and state of the art sessions in the main auditorium will have interactive voting and feedback facilities. Speakers should provide up to a maximum of 3 MCQ type questions based on their lecture. These should be presented by the speaker at the end of their lecture for voting by the audience. Please allow sufficient time at the end of your lecture for these. Please allow 1 minute per question and discussion. Dependent on room allocation where this facility is available those speakers will have received instructions with their letter of invitation. Copies of the presentation with interactive slides are required 10 days prior to the meeting in order to load questions.

FILMING: All sessions in Main Auditorium and Plenary session room will be filmed as part of the educational resources for BSIR . These presentations will be held on a secure server and only available to BSIR members.

AV FACILITIES: Data projection is available in all conference & workshop rooms, presenters will not be able to use their own laptop computers. There are no facilities for slide or OHP projection. The accepted presentation format is PowerPoint Version 2007 (Microsoft Office 2007). This is compatible with previous PowerPoint versions. Please do NOT bring any other presentation formats.

- Please choose the "On screen show" output within the "slide set up" menu when formatting your presentation.
- All presentations should be on CD Rom, or a USB compatible flash memory device.
- All presentation media should be clearly marked with session title, presenter surname & initials, title, date & time of presentation.
- Report to the duty AV technician in AV room as soon as possible and at least 4 hours before the presentation time to allow the presentation to be checked and loaded onto the system.
- We strongly recommend that if you intend to use VIDEO clips within a presentation, please send it to the AV technicians a minimum of 48 hours beforehand. General advice is that video clips in WMV format is the most likely to play. **YOU MUST ALSO INFORM THE BSIR CONFERENCE OFFICE ASAP IF YOU HAVE ANY ADDITIONAL AV/ INTERNET REQUIREMENTS.** These cannot be guaranteed and must be discussed beforehand .

THE BSIR AUDIO-VISUAL SERVICE CENTRE FOR THE MEETING IS IN EXCHANGE FOYER, MANCHESTER CENTRAL

OPENING TIMES:
Monday 14th Nov 2016 15.00 hrs to 18.00 hrs
Tuesday 15th Nov 2016 08.00 hrs to 18.00 hrs
Wednesday 16th Nov 2016 07.30 hrs to 18.00 hrs
Thursday 17th Nov 2016 08.00 hrs to 15.00 hrs

If you have any questions regarding your presentation please contact the BSIR Conference Organiser as soon as possible on +44 (0) 141 942 8104 or by email meeting@bsir.org.

GENERAL INFO & SOCIAL EVENTS

FOR FULL DETAILS, VISIT THE WEBSITE BSIR.ORG (ANNUAL MEETING SECTION)

BSIR 2016 VENUE:

Manchester Central, Petersfield, Manchester M2 3GX

MEETING DATES:

15th-17th November 2016 (Tuesday, Wednesday & Thursday)

REGISTRATION:

Open from 07.30am 15th November 2016 to 6pm each day, Exchange Foyer, Manchester Central

MEETING CLOSES:

17th November 2016 at 14.30pm

BSIR/BSIRT 2016 MEETING - TRAINEE DAY:

17th November 2016, 11-4pm, Details Registration Booklet, If you wish to attend please register at Registration Desk

2016 SOCIAL EVENTS:

Welcome Drinks Reception:

Tuesday 15th November 2016 , 18.00 -19.30, Exchange Hall Manchester Central

BSIR 2016 Annual Dinner:

Wed 16th November 2016 19.30 til late, Palace Hotel, Oxford Road Manchester M60 7HA



BSIR MEMBERSHIP:

If you wish to become a member of the BSIR then please contact admin@bsir.org for details.

FILMING:

Presentations in Main Auditorium (Exchange Auditorium) and Charter 4 will be filmed and presentations will be available after the meeting for BSIR members .

GENERAL INFO & SOCIAL EVENTS

CPD:

The meeting programme has been reviewed BY RCR for CPD awards . These will be available to download and print off from Bsir.org website after completing a feed back evaluation. If you are a BSIR member your CPD will be stored in your locker. All faculty participants Scientific Session & Poster presenters , Scholar awardees (both Essay & Case Study) will receive a certificate of presentation an/ participation. These are available from Registration Desk .

PHOTOGRAPHY @ BSIR:

Professional Headshots Opportunity (£15 charge) Please ask at registration .

POPPIES:

Please make a donation for the Poppy Appeal Charity/U Foundation



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DAY 1 - TUESDAY 15TH NOVEMBER 2016

ALL SESSIONS IN MAIN AUDITORIUM EXCHANGE AUDITORIUM UNLESS OTHERWISE STATED.

FOR MASTER CLASSES PLEASE REGISTER AT REGISTRATION. PLACES ARE LIMITED.

FOR INDUSTRY SHOW CASE AND TRAINING SESSIONS PLEASE INQUIRE DIRECTLY TO COMPANY ON THEIR STAND FOR AVAILABILITY.

TIME	SESSION & TOPIC	CHAIR* / SPEAKER
08.50-09.00	Welcome Address	Dr Raman Uberoi
09.00-10.00	Plenary 1: Interventional Radiology In Limb Salvage (DM) <ul style="list-style-type: none"> Diabetic foot care; current status and future directions in England. Open surgery in limb salvage and the role of multidisciplinary approach. Interventional Radiology: recent advances and cutting edge technology. 	Dr Raman Uberoi* & Dr Trevor Cleveland* Prof. Jon Valabhji Mr Kevin Varty Dr Konstantinos Katsanos
10.00-11.00	State of the Art 1: Aortic Dissection <ul style="list-style-type: none"> Keynote Lecture: Endovascular management of aortic dissection: what we know, think we know, and need to know. Imaging of aortic dissection. Neurological complications in aortic intervention; How can we mitigate the stroke and paraplegia risk in TEVAR. 	Dr Mo Hamady* & Dr Andrew Winterbottom* Prof. Mike Dake Prof. Richard McWilliams Prof. Tim Buckenham
	Presentation of BSIR Honorary Fellowship to Prof. Mike Dake	Dr Raman Uberoi
11.00-11.15	COFFEE, EXHIBITION & POSTERS	
11.15-12.15	Scientific Session 1: Aortic Intervention	Dr Reddi Yadavali & Dr Andrew Gordon
11.15-12.15	Scientific Session 2: Oncology Intervention (Charter 4)	Dr Phil Borg & Dr Damian Mullan
12.15-13.30	LUNCH, EXHIBITION & POSTERS:	
12.30-13.00	Major Sponsor Show Case Training Sessions - See page 13 for full details	
13.00-13.30	Dr Graham Plant Lecture - Is There A Third Way for Interventional Radiology?	Dr Anthony Nicholson
13.30-15.30	Society of IR Nurses & Radiographers (Exchange Auditorium) See page 12 For full programme	
13.30-14.30	Industry Technological Workshops A,B & C	
13.30-14.30	BSIR: Current Status of IR (Charter 4) <ul style="list-style-type: none"> Provision of IR services BSIR Communication Strategy – Enhancing the profile of IR Master Class A1: EVAR planning and principles of fenestration planning - hands on session. (Exchange Room 1) Master Class B1: Enteral Access; Gastrostomy, Jejunostomy. (Exchange Rooms 2 & 3)	Dr Raman Uberoi Dr Brian Stedman Drs Nick Burfitt, Rob William, Andrew Winterbottom & Ounali Jaffer Dr Hans Ulrich Laasch, Prof. Mick Lee & Prof. Derrick Martin
14.30-15.30	BSIR: Registries Audits Trials – Summaries & Updates (Charter 4) <ul style="list-style-type: none"> Balloons, Bypass & Stents for Treatment of severe ischaemia of the leg. BSIR Audits & Registries NVR Update Master Class A2: EVAR planning and principles of fEVAR planning - hands on session. (Exchange Room 1) Master Class B2: Enteral Access; Gastrostomy, Jejunostomy. (Exchange Rooms 2 & 3)	Mr Hugh Jarrett Dr Teik Choon See Drs Nick Burfitt, Rob William, Andrew Winterbottom & Ounali Jaffer Dr Hans Ulrich Laasch, Prof. Mick Lee & Prof. Derrick Martin
15.30-16.00	COFFEE, EXHIBITION & POSTERS	
16.00-17.00	State of the Art 2: Oncology Intervention; Update <ul style="list-style-type: none"> Keynote Lecture: Recent advances and trials in IO. MR guided drug delivery. The next frontier in image guided IR. 	Dr Brian Stedman* & Dr Jon Bell* Prof. Jeff Geschwind Prof. W. Gedroyc Prof. Geert Maleux
16.00-17.00	Plenary 2: Interventional Urology (Charter 4) <ul style="list-style-type: none"> Renal access; from simple to difficult cases; top pearls for safe practice. Ureteric stenting; How can we make it better? Management of iatrogenic and traumatic renal injuries. Maintenance of AVF ; How can we make intervention more durable? 	Dr Phil Haslam* & Dr Lakshmi Ratnam* Dr Phil Haslam Dr Rob Williams Dr Deborah Low Dr Nick Woodward
17.00-18.00	Plenary 3: Interventions for visceral ischemia and aneurysms <ul style="list-style-type: none"> Non-invasive Imaging of visceral and renal arteries; where do we stand? Percutaneous intervention for mesenteric ischemia; patient selection, technique and outcome. Visceral aneurysms; who, when and how to treat. Short and long term outcome of visceral stenting in fenestration and branched stent graft. 	Dr Andrew Winterbottom* & Dr Hilary White* Dr Nadeem Shaida Dr Graham Robinson Dr Ralph Jackson Dr John Hardman
17.00-18.00	Oncology Interventions 2: HCC (Charter 4) <ul style="list-style-type: none"> The hepatology perspective in treatment selection for HCC. The current imaging perspective in the diagnosis of HCC. Treatment of early stage HCC; ablative techniques and outcomes. Treatment of intermediate and advanced stage HCC (TACE, TAE, SIRT and combination treatment with biological agents) 	Prof. John Karani* & Dr Finn Farquharson* Prof. John O'Grady Dr Pauline Kane Dr Dominic Yu Prof. Jeff Geschwind
18.00-18.45	Mortality & Morbidity & Amazing Solutions	Dr Teik Choon See & Dr Elika Kashef
18.45-19.30	WELCOME DRINKS RECEPTION	

SCIENTIFIC SESSIONS 1 & 2

PLEASE ENSURE THAT THE PRESENTATION TAKES LESS THAN 8 MINUTES (YOU SHOULD AIM FOR 6 MINUTES WITH 2 MINUTES FOR QUESTIONS!). IF YOU TALK FOR MORE THAN 6 MINUTES YOU WILL BE INTERRUPTED AND ASKED TO SUM UP IN 30 SECONDS TO ALLOW TIME FOR QUESTIONS. PRESENTATIONS WILL BE JUDGED AND SCORED. PRIZES WILL BE AWARDED SUBJECT TO ELIGIBILITY.

SCIENTIFIC SESSION 1: AORTIC INTERVENTION

11.15-12.15, Main Auditorium - Tuesday 15th November 2016

Chairs: Dr Reddi Yadavali & Dr Andrew Gordon

NB: Please speak for 6mins with 2 mins for questions

ORDER:	TITLE:	AUTHOR:
1	A single centre experience of clinical outcome in distal aortic stenosis angioplasty	Thomas Gordon
2	Early Experience with GoreÂ® Iliac Branch Endoprosthesis (IBE)	Asim Shah
3	Single-Centre Experience with the Bolton Treovance Endograft	Arron Thind
4	Cerebral embolic protection to prevent neurological injury in TEVAR	Anisha Perera
5	OxFEVAR: outcomes in endovascular repair of complex abdominal aortic aneurysms in Oxford.	Jonathan Durbin
6	Randomized Controlled Trial of Paclitaxel-Coated Balloon Angioplasty for the Treatment of Symptomatic Central Venous Stenosis in Dialysis Access	Stavros Spiliopoulos
7	Rationalisation of short-term follow-up imaging after EVAR	Dylan Roi

SCIENTIFIC SESSION 2: ONCOLOGY INTERVENTION

Time: 11.15-12.15 Charter 4 - Tuesday 15th November 2016

Chairs: Dr Phil Borg & Dr Damian Mullan

NB: Please speak for 6mins with 2 mins for questions

ORDER:	TITLE:	AUTHOR:
8	Demonstration of the extension of Microwave ablation (MWA) zone along intra-hepatic vessels using an ex-vivo perfusion porcine liver model.	Saurabh Singh
9	Lung cancer tissue diagnosis in poor lung function: addressing the ongoing percutaneous lung biopsy FEV1 paradox using Heimlich valve	Aniket Tavare
10	Percutaneous Hepatic Irreversible Electroporation: an option for challenging cases?	Sebastian Mafeld
11	Evaluation of the Radiologically Guided Microwave Ablation service at Norfolk & Norwich	Baljeet Dhillon
12	The outcomes and efficacy of thermal lung ablation: 8-year data	Sarena Virdee
13	Outcomes Following Treatment With DEBIRI in 58 Cases	An Ngo
14	Scottish multicenter retrospective study investigating the survival outcomes in patients receiving Doxorubicin-eluting beads versus conventional transarterial chemoembolization for treatment of HCC.	Shueh Hao Lim

FULL ABSTRACTS AVAILABLE ON PAGES 77-84

THE GRAHAM PLANT PROFESSORSHIP 2016

THE GRAHAM PLANT PROFESSORSHIP 2016

This Professorship is jointly funded by the RCR and BSIR in memory of Dr Graham Plant, a founder of the BSIR who was an enthusiastic teacher and supporter of education for Interventional Radiology.

The 2016 Lecture this year will be delivered by Dr Tony Nicholson who knew Graham well and a long standing member of BSIR.

The title this year will be:



IS THERE A THIRD WAY FOR INTERVENTIONAL RADIOLOGY?

The 2017 visiting professorship has been awarded to Professor Duncan Ettles who will take up this position and deliver the Graham Plant Lecture at BSIR 2017 Birmingham.

The visiting professor will be expected to undertake 6-8 visits to training programmes, over a period of 12 months, to deliver lectures and undertake appropriate workshops or small group teaching as part of each visit. One lecture will be filmed and made available online. The purpose of the visits is educational: to highlight the role of IR in improving patient care and academic IR in the development of advanced imaging and procedural techniques, along with providing IR teaching at both trainee and consultant level at centres that might otherwise not have access to advanced subspecialty techniques or the field of interest of the successful candidate.



SIRNR PROGRAMME

Tuesday 15th November 2016
SIRNR (Society of Nurses and Radiographers) Programme
13.30-15.30, Exchange Auditorium

Chair: Mrs Mary Donnelly

Development of angioplasty and stenting

Dr Steve D Souza

Incident reporting and Risk reduction in IR

Dr Elizabeth O'Grady

Enteral feeding, RIGG's

Mr Owen Dickenson

Presentation TBC

Q & A Session

The Society of Interventional Radiology Nurses and Radiographers was set up to support and educate professionals of both disciplines working clinically within IR. The group has endeavoured to deliver a programme at BSIR conference each Autumn and has held SIRNR supported events locally throughout the country.

Our most challenging remit from SIRNR members was to deliver an educational platform in order to assist members who were unable to attend study due to constraints in funding and study time. We were kindly supported at the time by BSIR and Covidien to develop a web based site. This used IT technology to deliver monthly IR webinars over 2015-2016. Unfortunately this programme of educational sessions was not well attended by members, despite the committees continued endeavours to promote this in IR units ,hospitals and through our website.

Unfortunately, we now have a situation that the original committee is seriously reduced in number and very few members have stepped forward to take on committee roles. The situation for the Society is serious and will require engagement from ALL members to ensure its continuation in its current form.

The Society is for IR Nurses and Radiographers who we know face challenging and difficult changes throughout the country every day. We need new members and committee and for all to take an active role within the society which was formed for YOU!

Please attend the programme on Tuesday and the SIRNR AGM on Wednesday to give your thoughts and ideas on the Society direction.

WE NEED YOU!



INDUSTRY SHOWCASES

TUESDAY 15TH NOVEMBER 2016 - INDUSTRY SHOWCASE & TRAINING SESSIONS

LUNCHTIME, 12.30-13.30 - ALL SESSIONS WILL RUN CONCURRENTLY.

PLEASE REGISTER AT THE INDUSTRY STANDS FOR AVAILABILITY

REFER TO PLAN AND VENUE MAP FOR LOCATION OF THESE SESSIONS

LOCATIONS:

EXCHANGE HALL = EXHIBITION HALL, LEARNING ZONES & STANDS

EXCHANGE ROOMS 4/5, 6/7, & 10 - UPPER FLOOR ACCESSED BY STAIRS AT END OF EXCHANGE HALL OR VIA STAIRS IN FOYER.

TIME	SESSION & TOPIC	CHAIR* / SPEAKER
12.30-13.00	Showcase 1: BOSTON SCIENTIFIC Learning Zone 4, Exchange Hall (Exhibition Hall) "Meet the Expert" JetStream Practical Session	Dr K. Katsanos St Thomas's Hospital
	Showcase 2: BTG Exchange 10, Upper Floor 1 "The changing face of intra-arterial therapy for HCC :	Dr Peter Littler Freeman Hospital
	Showcase 3: COOK MEDICAL Learning Zone 1, Exchange Hall "Transluminal Biliary Biopsy - Techniques and Outcomes"	Dr Nadeem Shaida
	Showcase 4: PENUMBRA On Stand M11, Exchange Hall "Endovascular Mechanical Thrombectomy: Experience with the Penumbra Indigo System in venous and arterial cases"	Dr Parag Patel Froedtert Hospital and Medical College of Wisconsin
	Showcase 5: MEDTRONIC Exchange Room 4 & 5, Upper Floor 1 Thermosphere Technology – Fact or Fiction	Dr Shahzad Ilyas St Thomas' Hospital
	Showcase 6: BVM Exchange 6 & 7, Upper Floor 1 "Meet the Expert" 'Biliary Intervention for Hilar Strictures.'	Dr Hans Ulrich Laasch The Christie
	Showcase 7: TERUMO: On Stand M10, Exchange Hall "Meet the Expert" Advanced coiling techniques	Dr Ruben Lopez Benitez Switzerland
14.30-15.30	Showcase 8: VASCUTEK On Stand M9, Exchange Hall "Meet the Expert" How to Plan and Successfully Implant with the Fenestrated Anaconda™ Device	Dr Andrew Hatrick Frimley Park Hospital

MASTERCLASSES & WORKSHOPS

TUESDAY 15TH NOVEMBER 2016 - INDUSTRY SHOWCASE & TRAINING SESSIONS
 LUNCHTIME, 12.30-13.30 - ALL SESSIONS WILL RUN CONCURRENTLY.
 **PLEASE REGISTER AT THE INDUSTRY STANDS FOR AVAILABILITY **
 REFER TO PLAN AND VENUE MAP FOR LOCATION OF THESE SESSIONS

LOCATIONS: EXCHANGE HALL = EXHIBITION HALL, LEARNING ZONES & STANDS
 EXCHANGE ROOMS 4/5, 6/7, & 10 - UPPER FLOOR ACCESSED BY STAIRS AT END OF EXCHANGE HALL OR VIA STAIRS IN FOYER.

TIME	SESSION & TOPIC	CHAIR* / SPEAKER
13.30-14.30	Tech. Workshop A: ABBOTT VASCULAR Exchange 6/7, Upper Floor 1 How to deal with today's challenging SFA & Popliteal Disease <ol style="list-style-type: none"> 1. The Challenge of chronic total occlusions, Result from the "Superfast" trail, 2. Subintimal stenting in complex CLI lesions. Result from the "Supersub" trail, 3. Supera placement – Difficult or different, Tips & Tricks. 4. Retrograde technique for placement of Supera vascular mimetic implant, Step-by-Step, 	Dr Katsanos Dr. Palena Dr Katsanos Dr. Palena
13.30-14.30	Master Class A1: EVAR planning and principles of fenestration planning - hands on session. (Exchange Room 1) Master Class outlines: This is a one-hour interactive and hands-on session. The moderators are expected to deliver the education message through short talks, case based discussion and hands-on experience on TeraRecon laptops (provided by industry). Learning objectives <ol style="list-style-type: none"> 1. To understand the clinical and radiological assessment of EVAR cases 2. To demonstrate the available tools and equipment. 3. To show tips and tricks that maximize success and minimise complications 4. To understand the principles of fEVAR planning. 	Drs Nick Burfitt, Rob William, Andrew Winterbottom & Ounali Jaffer.
	Master Class B1: Enteral access;Gastrostomy, Jejunostomy. (Exchange Room 2 & 3) Master Class outlines: This is a one-hour interactive and hands-on session. The moderators are expected to deliver the education message through short talks, case based discussion among moderators together with hands-on experience with relevant tools.	Dr Hans Ulrich Laasch, Professor Mick Lee & Prof. Derrick Martin
14.30-15.30	Master Class A2: EVAR planning and principles of fEVAR planning - hands on session. (Exchange 1) - As above Master Class B2: Enteral access;Gastrostomy, Jejunostomy. (Exchange Room 2 & 3) - As above	Drs Nick Burfitt, Rob William, Andrew Winterbottom & Ounali Jaffer. Dr Hans Ulrich Laasch, Professor Mick Lee & Prof. Derrick Martin

MASTER CLASSES PLACES ARE LIMITED SO PLEASE BOOK AT REGISTRATION

DAY 2 - WEDNESDAY 16TH NOVEMBER 2016

ALL SESSIONS IN MAIN AUDITORIUM EXCHANGE AUDITORIUM UNLESS OTHERWISE STATED.

FOR MASTER CLASSES PLEASE REGISTER AT REGISTRATION. PLACES ARE LIMITED.

FOR INDUSTRY SHOW CASE AND TRAINING SESSIONS PLEASE INQUIRE DIRECTLY TO COMPANY ON THEIR STAND FOR AVAILABILITY.

TIME	SESSION & TOPIC	CHAIR* / SPEAKER
08.55-09.50	State of the Art 3: Interventional Robotics. <ul style="list-style-type: none"> • Robotic intervention; shaping the future. • Robotics from benchtop to bed side; the role of translation research. • Do we need a robot in IR? 	Dr Mo Hamady* & Dr Malcolm Johnston* Prof. Guang Zhong Yang Mr Ranan Das Gupta Dr Marc Sapoval
08.55-09.50	Oncology Intervention 3: Controversies in management of colo-rectal liver metastasis. (Charter 4) <ul style="list-style-type: none"> • Where is the place of DEB-IRI in the treatment of colorectal liver metastases? • Reducing local recurrence using image guided ablation. • Y-90 Radioembolisation: 1st, 2nd or 3rd line management? • Portal vein embolisation; timing & technique to get better volume response. 	Dr David Breen* & Dr Neil Davies* Dr Jonathan Evans Dr David Breen Prof. Jeff Geschwind Dr Rob Thomas
09.50-10.45	Scientific Session 3: Peripheral Vascular Intervention.	Dr Ram Kasthuri & Dr Angela Rogers
09.50-10.45	Scientific Session 4: GI, GU & Hepatobiliary. (Charter 4)	Dr Sarah O Shea Dr Nabil Kibriya
10.45-11.00	COFFEE, EXHIBITION & POSTERS	
11.00-11.55	Plenary 4: BSIR Hot Debate - IR at critical crossroad: A roadmap for evolution or sleepwalking to extinction. <ul style="list-style-type: none"> • IR Curriculum and sub speciality status: the story so far • IR In DGHs • RCR View • Discussion 	Dr Raman Uberoi*, Dr Trevor Cleveland* & Dr Giles Maskell* Dr Tony Nicholson Dr Alex Chapman Dr Nicola Strickland
11.00-11.55	Oncology Intervention 4: Ablation outside the liver; lung Primary and metastatic lung neoplasms; treatment options and tumor board discussion. (Charter 4) <ul style="list-style-type: none"> • Primary lung ca; surgical perspective. • Stereotactic radiotherapy; patient selection and outcome. • Lung ablation for primary and secondary lung ca; patient selection, technique and outcome. • Case discussion. 	Dr Nicos Fotiadis* & Dr Paras Dalal* Ms Emma Beddow Dr Merina Ahmed Dr Paras Dalal All
11.55-12.45	Master Class C1: Ablation Tools & Toys (Liver & Kidney). (Exchange Room 1)	Dr David Breen, Dr Peter Littler & Dr Tze Wah
11.55-12.45	Master Class D1: Alternative arterial access (including radial and pedal accesses). (Exchange rooms 2 & 3)	Dr Darren Klass, Dr Iqbal Malik & Dr Irfan Ahmed
11.55-12.45	BSIR Workshop 1: IR Coding. (Exchange room 4 & 5) BSIR Workshop 2: Chronic MSK Pain Management. (Exchange room 6 & 7) BSIR Workshop 3: IR clinic setting and patient assessment. (Exchange 10)	Dr Craig Jobling & Ms Jill Cockrill Dr Zaid Aldin, Dr Damien Taylor & Dr Mike Platts Dr Dan Kusuma & Dr Mark Regi
12.45-14.15	LUNCH, EXHIBITION & POSTERS: Major Sponsor Show Case Training Sessions - See page 19 for full details	
13.00-13.45	BSIRT AGM (Charter 4)	
14.15-15.00	Wattie Fletcher Lecture & Presentations Wattie Fletcher Lecturer: The past, present and future of endovascular aortic aneurysm treatment.	Dr Raman Uberoi* Prof. Richard McWilliams
15.00-15.15	Gold Medal: Recipient: Professor Anthony Watkinson BSIR Honorary Fellowship: Recipient: Dr Giles Maskell	Dr Raman Uberoi*
15.15-16.00	BSIR AGM	
15.15-16.00	SIRNR: AGM & Forum (Charter 4)	
16.00-16.30	COFFEE, EXHIBITION & POSTERS	
16.30-17.30	Master Class C2: Ablation Tools & Toys (Liver & Kidney). (Exchange Room 1)	Dr David Breen, Dr Peter Littler & Dr Tze Wah
16.30-17.30	Master Class D2: Alternative arterial access (including radial and pedal accesses). (Exchange Room 2 & 3)	Dr Darren Klass, Dr Iqbal Malik & Dr Irfan Ahmed
16.30-17.30	BSIR Workshop 4: Venous IR Management of acute and chronic deep venous occlusion. (Exchange Rooms 4 & 5) BSIR Workshop 5: Prostate Artery Embolisation. (Exchange Rooms 6 & 7) BSIR Workshop 6: Paed IR for general interventionists. (Exchange 10)	Dr Andrew Willis, Dr Julian Hague & Dr Narayan Karunanithy Dr Nigel Hacking & Dr Jafar Golzarian Dr Sam Stuart & Dr Alex Barnacle
17.30 -17.45	Changes to Industry Rules on Sponsorship (Main Auditorium)	Mr Andrew Davies ABHI
17.30-17.45	BSIR Snap shot survey of the year (Charter 4)	Dr Chris Hammond
17.45-18.30	Complex Case Session Panel A: Dr John Oakes, Dr Jafar Golzarian & Dr Sapna Puppala Panel B: Prof. Jeff Geshwind, Dr Douglas Turner & Dr Marc Sapoval	Dr Tarun Sabharwal* & Dr Andrew Hatrick*
19.45 til late	BSIR 2016 ANNUAL DINNER	

SCIENTIFIC SESSIONS 3 & 4

PLEASE ENSURE THAT THE PRESENTATION TAKES LESS THAN 8 MINUTES (YOU SHOULD AIM FOR 6 MINUTES WITH 2 MINUTES FOR QUESTIONS!). IF YOU TALK FOR MORE THAN 6 MINUTES YOU WILL BE INTERRUPTED AND ASKED TO SUM UP IN 30 SECONDS TO ALLOW TIME FOR QUESTIONS. PRESENTATIONS WILL BE JUDGED AND SCORED. PRIZES WILL BE AWARDED SUBJECT TO ELIGIBILITY.

SCIENTIFIC SESSION 3: PERIPHERAL VASCULAR INTERVENTION

Time: 09.45-10.45, Main Auditorium - Wednesday 16th November 2016

Chairs: Dr Ram Kasthuri & Dr Angela Rogers

NB: Please speak for 6mins with 2 mins for questions

ORDER:	TITLE:	AUTHOR:
15	Effectiveness of drug-eluting balloon angioplasty versus plain balloon angioplasty for the treatment of in-stent re-stenosis in patients with superficial femoral artery stents	Mohammed Asim Khan Kabuli
16	A comparison of drug coated balloon and plain balloon angioplasty for femoropopliteal disease in real world practice	Rajdeep Jennifer Kaur Dhammi
17	Angiosculpt scoring balloon angioplasty in hemodialysis fistula stenosis; early results.	Umme Sara Zishan
18	Review of popliteal and infrapopliteal angioplasty in a Major Teaching Hospital	Shao Jin Ong
19	Local Practice regarding endovascular management of SFA disease: Plain balloon Angioplasty (BA) vs Angioplasty and Stenting (AS)	Guo Liang Yong
20	Laser atherectomy for peripheral arterial disease - a UK centre experience	Usman Javed Mahay
21	A feasibility study of Microwave Radiometry Thermometry for the non-invasive diagnosis of critical limb ischemia in diabetic patients.	Lazaros Reppas

SCIENTIFIC SESSION 4: GI GU HEPATOBILIARY

Time: 09.45-10.45, Chapter 4 - Wednesday 16th November 2016

Chairs: Dr Sarah O'Shea & Dr Nabil Kibriya

NB: Please speak for 6mins with 2 mins for questions

ORDER:	TITLE:	AUTHOR:
22	1000 Native paediatric renal biopsies: Success, outcome and complications rates from a quaternary centre	Aneeta Parthipun
23	Covered double colonic stents: Reduced migration - optimum patency.	Hans-Ulrich Laasch
24	NiTiNOL degradation as a cause for failure of oesophageal stents	Steve J. Black
25	Retrograde Ureteric Stent Retrieval- A Multicentre Experience	Luigi Pancione
26	Bacterial isolates from biliary cultures obtained during percutaneous biliary intervention, a multicentre analysis	Pavan Najran
27	Plugging the Gap: Liver Tract Embolization Following PTC with Hep-Plug	Anup Mathew
28	Palliation for obstructive jaundice - Can we select patients?	Ganesh Alluvada

FULL ABSTRACTS AVAILABLE ON PAGES 85-96

OOH INTERVENTION SNAPSHOT SURVEY

OOH INTERVENTION SNAPSHOT SURVEY FOR HAEMORRHAGE CONTROL

The BSIR undertook a snapshot survey of OOH intervention for haemorrhage control for a one week period in October 2016. All IRs in the UK were invited to participate and enter data on cases they had done OOH in this week.

There were 37 cases entered, corresponding to an annual workload of nearly 2000 cases. Data on referral, networking, staffing and anaesthetic support, timing, outcome and mortality were collected and have revealed some familiar and not-so-familiar themes. The data will be presented during this session with an opportunity for discussion of their implications and how they might leverage further development of IR services in the future.



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MASTERCLASSES & WORKSHOPS

TIME	SESSION & TOPIC	CHAIR* / SPEAKER
11.55-12.45	Master Class C1: Ablation Tools & Toys (Liver & Kidney). (Exchange Room 1) Learning objectives: 1. To understand the clinical indication and patient selection for thermal ablation. 2. To demonstrate the available tools. 3. To show tips and tricks that maximize success and minimise complications 4. To understand the best post intervention care.	Drs David Breen, Dr Peter Littler & Dr Tze Wah
	Master Class D1: Alternative arterial access (including radial and pedal accesses). (Exchange Rooms 2 & 3) Learning objectives: 1. To understand the clinical and radiological assessment of access sites 2. To demonstrate the available tools. 3. To show tips and tricks that maximize success and minimise complications 4. To understand the best post intervention care.	Dr Darren Klass, Dr Iqbal Malik & Dr Irfan Ahmed
	BSIR Workshop 1: IR Coding (Exchange Room 4 & 5) Learning objectives 1. To explain the updates in IR coding 2. To show practical examples of using IR codes 3. To demonstrate the advantages and implications of using the proper coding	Dr Craig Jobling & Ms Jill Cockrill
	BSIR Workshop 2: Chronic MSK Pain Management (Exchange Room 6 & 7)	Dr Zaid Aldin, Dr Damien Taylor & Dr Mike Platts
	BSIR Workshop 3: IR clinic setting and patient assessment (Exchange 10) Learning objectives 1. Understand the minimum requirements to have proper and viable IR clinic setting. 2. To refresh and enhance the knowledge of patient's work-up for vascular and non vascular procedures. 3. To refresh and enhance the knowledge of clinical examination with examples related to typical IR patients (vascular and oncology) 4. To re-affirm the need and learn the best way for proper documentation throughout the patient journey in IR care. 5. To understand and learn the principles of breaking bad news/ dealing with difficult patients and managing patients' expectations.	Dr Dan Kusuma & Dr Mark Regi
16.30-17.30	Master Class C2: Ablation Tools & Toys (Liver & Kidney) (Exchange Room 1) - As Above	Drs David Breen, Dr Peter Littler & Dr Tze Wah
	Master Class D2: Alternative arterial access(including radial and pedal accesses). (Exchange Rooms 2 & 3) - As Above	Dr Darren Klass, Dr Iqbal Malik & Dr Irfan Ahmed
	BSIR Workshop 4: Venous IR Management of acute and chronic deep venous occlusion. (Exchange Rooms 6 & 7) Learning objectives: 1. To understand the clinical and radiological assessment of acute and chronic venous occlusion 2. To describe and understand the best IR approach 3. To demonstrate the available tools for venous recanalisation 4. To show tips and tricks that maximize success and minimise complications 5. To understand the best post intervention care.	Dr Andrew Willis, Dr Julian Hague & Dr Narayan Karunanithy
	BSIR Workshop 5: Prostate Artery Embolisation (Charter 10) Learning objectives: 1. To understand patients assessment and work up 2. To show tips tips and tricks to maximum outcome and avoid complications. 3. To understand post intervention care	Dr Nigel Hacking & Dr Jafar Golzarian
	BSIR Workshop 6: Paed IR for general interventionists (Exchange 10) Learning objectives 1. To understand patient's assessment and work up 2. To demonstrate the characteristic s of tools and kits used in Paed IR. 3. To show tips and tricks to maximum outcome and avoid complications. 4. To understand post intervention care	Dr Sam Stuart & Dr Alex Barnacle

MASTER CLASSES PLACES ARE LIMITED SO PLEASE BOOK AT REGISTRATION

INDUSTRY SHOWCASES

WEDNESDAY 16TH NOVEMBER 2016 - INDUSTRY SHOWCASE & TRAINING SESSIONS

LUNCHTIME, 13.00-13.30 - ALL SESSIONS WILL RUN CONCURRENTLY.

**PLEASE REGISTER AT THE INDUSTRY STANDS FOR AVAILABILITY **

REFER TO PLAN AND VENUE MAP FOR LOCATION OF THESE SESSIONS

LOCATIONS: EXCHANGE HALL = EXHIBITION HALL, LEARNING ZONES & STANDS

EXCHANGE ROOMS 4/5, 6/7, & 10 - UPPER FLOOR ACCESSED BY STAIRS AT END OF EXCHANGE HALL OR VIA STAIRS IN FOYER.

TIME	SESSION & TOPIC	CHAIR* / SPEAKER
13.00-13.30	Showcase 9: BOSTON SCIENTIFIC Learning Zone 4, Exchange Hall (Exhibition Hall) "Meet the Expert" AngioJet Practical Session for DVT treatment	Dr A Willis QE Birmingham
	Showcase 10: BTG Exchange 10, Upper Floor 1 Innovative treatment for PE and DVT	Dr Andrew Wigham Oxford University Hospitals
	Showcase 11: COOK MEDICAL Learning Zone 1, Exchange Hall 'ENHANCED use of the Advance Enforcer 35 scoring balloon in haemodialysis access'	Dr Narayan Karunanithy
	Showcase 12: PENUMBRA On Stand M11, Exchange Hall "The impact of new embolisation tools, changing the paradigm of peripheral embolisation with Ruby, POD and POD packing coil"	Dr. Homoyoon Mehrzad QE Birmingham
	Showcase 13: MEDTRONIC Exchange Room 4 & 5, Upper Floor 1 Making the informed choice: The compelling evidence for IN.PACT DCB in the SFA	Dr Trevor Cleveland Sheffield Vascular Institute & Dr Stephen Kam Medtronic
	Showcase 14: TERUMO On Stand M9, Exchange Hall "Meet the Expert" Advanced coiling techniques	Dr Ruben Lopez Benitez Switzerland
13.30-14.00	Showcase 15: BVM Exchange Room 6 & 7 "Meet the Expert" Radiofrequency Ablation of Benign Thyroid Nodules.'	Dr. Camillo Aliberti Padova
13.30-14.00	Showcase 16: VASCUTEK On Stand M9, Exchange Hall "Meet the Expert" How to Plan and Successfully Implant with the Fenestrated Anaconda™ Device	Dr Andrew Hatrick (Again at Wed 10.45 , Thurs 11.00)

DAY 3 - THURSDAY 17TH NOVEMBER 2016

ALL SESSIONS IN MAIN AUDITORIUM EXCHANGE AUDITORIUM UNLESS OTHERWISE STATED.
BSIR/BSIRT TRAINEE DAY 17TH NOVEMBER 2016 - PLEASE REGISTER AT REGISTRATION.

TIME	SESSION & TOPIC	CHAIR* / SPEAKER
09.00-10.00	State of Art 4: Pulmonary artery embolism; Time for action! <ul style="list-style-type: none">Advances in medical AND Interventional management of PEs; Rapid Response Team and current treatment algorithm.Interventional options for treatment of PE; current technology and future directions.Case presentation & lessons learned.	Dr R. Lakshminarayan* & Dr Andrew Wigham* Dr Rutger Lely Dr Said Habib Dr Narayan Karunanithy
09.00-10.00	Plenary 5: Stroke interevntion (Charter 4) <ul style="list-style-type: none">IAT service configuration & delivery: current status & future vision.Manpower and training credentials for IAT.Techniques and technology in IAT / can peripheral interventionists benefit from advanced neurointerventions?	Dr Raman Uberoi* & Dr Chris Rowland-Hill Dr Peter Flynn Dr Rob Lenthall Dr Norman McConachie
10.00-11.00	State of the Art 5: Emerging embolisation procedures. <ul style="list-style-type: none">PAE; current status and future direction.ROPE registry; Update.Bariatric embolisation ; where do we stand?Emborrhoid; a new horizon in modern IR.	Dr Nigel Hacking* & Dr Timothy Bryant* Dr Jafar Golzarian Dr Nigel Hacking Dr Jafar Glozarian Dr Marc Sapoval
11.00-11.30	BRUNCH BREAK	
11.30-12.30	Scientific Session 5: Farrago	Dr Rubeena Razzaq & Dr Rob Stockwell
11.30-12.30	Scientific Session 6: Embolisation (Charter 4)	Dr David Thompson & Dr Anthie Papadopoulou
12.30-13.30	Plenary session 6: GI-stents: Going off-piste <ul style="list-style-type: none">Oesophageal stents: when to talk to the endoscopist?In the surgeon's tracks.Off-label use of biodegradable stents.	Dr Hans Ulrich Laasch* & Prof. Michael Lee* Dr Javaid Iqbal Dr Hans Ulrich Laasch Dr Damian Mullan
12.30-13.30	Oncology Interventions 5: Kidney: Renal tumors; treatment options & tumor board discussion. (Charter 4) <ul style="list-style-type: none">Nephron sparing surgery.Thermal ablation with RFA/MWA.Cryotherapy.Non Thermal ablation with IRE.Case discussion.	Dr Tze Wah* & Dr Des Alcorn Mr David Hrouda Dr Ian McCafferty Dr David Breen Dr Phil Haslam All
13.30 -14.30	Plenary Session 7: Safety issues & occupational hazards in IR. <ul style="list-style-type: none">Radiation protection in modern IR; update.How not to fail as an interventional radiologist: the importance of human factors.Patient Safety - a barrier to progress?	Dr Sam Chakraverty* Dr Peter Riley Dr Paul McCoubrie Dr Sam Chakraverty
14.30-14.35	CLOSE OF MEETING	Dr Raman Uberoi, BSIR President



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SCIENTIFIC SESSIONS 5 & 6

PLEASE ENSURE THAT THE PRESENTATION TAKES LESS THAN 8 MINUTES (YOU SHOULD AIM FOR 6 MINUTES WITH 2 MINUTES FOR QUESTIONS!). IF YOU TALK FOR MORE THAN 6 MINUTES YOU WILL BE INTERRUPTED AND ASKED TO SUM UP IN 30 SECONDS TO ALLOW TIME FOR QUESTIONS. PRESENTATIONS WILL BE JUDGED AND SCORED. PRIZES WILL BE AWARDED SUBJECT TO ELIGIBILITY.

SCIENTIFIC SESSION 5: FARRAGO

Time: 11.30-12.30, Main Auditorium - Thursday 17th November 2016

Chairs: Dr Rubeena Razzaq & Dr Rob Stockwell

NB: Please speak for 6mins with 2 mins for questions

ORDER:	TITLE:	AUTHOR:
29	Clinical outcome of sclerotherapy in lymphatic malformations.	Sam Stuart
30	Audit on compliance with radiation protection measures within Freeman IR department.	Nadia Mcallister
31	Do tariffs cover costs? A patient-level costing analysis.	Trevor Cleveland
32	Outcomes of percutaneous portal vein intervention in a single UK paediatric liver transplantation programme.	Ravi Patel
33	Coding - Its more important than you think!!	Pavan Najran
34	Interventional Radiology Training in the UK - a time for a change in direction?	Fatemeh Sakhinia
35	Patient satisfaction with consent processes in interventional radiology.	Justine Sullivan

SCIENTIFIC SESSION 6: EMBOLISATION

Time: 11.30-12.30, Chapter 4 - Thursday 17th November 2016

Chairs: Dr David Thompson & Dr Anthie Papadopoulou

NB: Please speak for 6mins with 2 mins for questions

ORDER:	TITLE:	AUTHOR:
36	The Emergence of Polyhydrophobic Injectable Liquid (PHIL) As A Novel Embolic Agent In The Vascular System.	Nadeem Shaida
37	Effectiveness of superior hypogastric nerve block in pain management following uterine fibroid embolisation.	Akash Prashar
38	The use of radiology for haemorrhage control in lower gastrointestinal bleeding: results from a national comparative audit.	Kathryn Oakland
39	Long term outcomes of selective trans-catheter arterial embolization for the management of intractable bladder bleeding.	Lazaros Reppas
40	Transarterial embolization in palliating haemorrhagic tumours: a major cancer centres experience.	Janarthan Suntharanathan
41	Prostate artery embolization for the treatment of benign prostatic hyperplasia: a prospective single-center study.	Marco Salsano
42	Uterine Arteries Embolisation (UAE) in The Management of Massive Postpartum Haemorrhage: A Review of One Center Experience in the Gulf Region.	Jamal Al Deen AlKoteesh

FULL ABSTRACTS AVAILABLE ON PAGES 97-100

BSIR/BSIRT TRAINEE DAY PROGRAMME

BSIR/BSIRT TRAINEE DAY PROGRAMME

Thursday 17th November 2016, 11.00

NB: PLEASE BOOK WORKSHOPS AT REGISTRATION

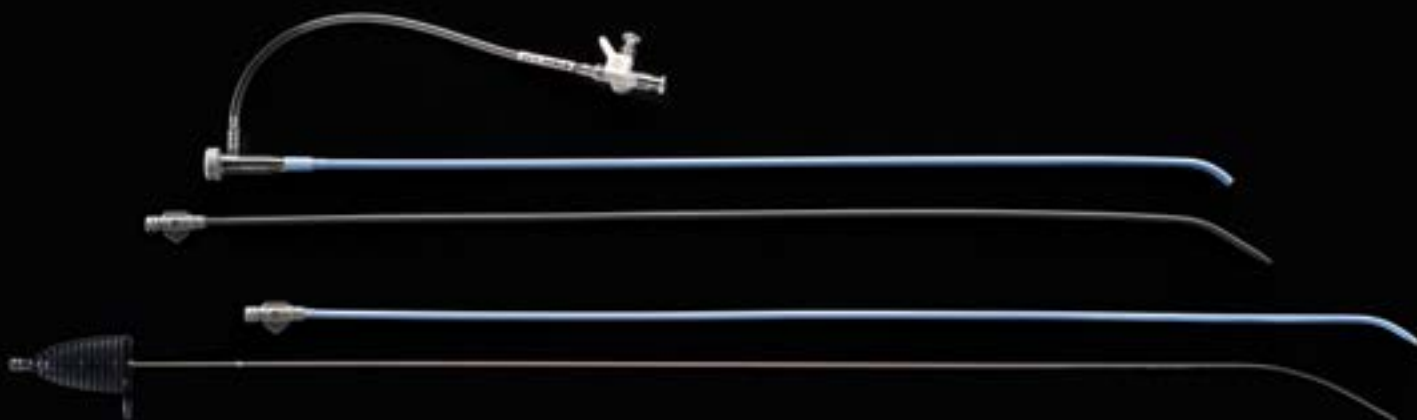
TIME	SESSION, TOPIC & SPEAKER	VENUE
11:00-11:05	Introduction to the program.	Dr Bella Huasen
11:05-11:30	Inspirational talk; My IR Journey	Dr Jo Brookes
11:30-11:45	How to start your own journey: Over view of the sub specialty options in IR.	Dr Raman Uberoi
11:45-12:00	Endoscopy/ERCP for IRs.	Mr Owen Thomas Dickinson, IR Nurse
12:00-12:30	Fellowships in IR Abroad and the UK.	Dr Naomi Hersey & Dr Aws Alfahad
12:30-13:15	Lunch	
13:15-13:30	How to secure a number in Interventional Radiology.	Dr Mark Regi
13:30-14:00	How to get an amazing IR CV!	Dr Jon Bell
14:00-14:15	How to excel in time management and organizational skills for IR.	Coach House: Will McKelvie
14:15-14:45	The future IR trainee; how to excel and survive.	Dr N. Kikani
14:45-15:00	Coffee Break	
15:00-16:00	Hands-on Work shops and open discussions: Hands on small stations with simulators to try. Also opportunity for students/trainees to speak directly about how to get into radiology - discuss CV – Management issues.	



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BSIR HONORARY FELLOWSHIP

PROFESSOR MIKE DAKE

Michael D. Dake is known internationally as a major contributor to the development of vascular stent-grafting and image-guided treatments for arterial and venous diseases. Since 2008, Dake has been the Thelma and Henry Doelger Professor in Stanford University's Department of Cardiovascular Surgery and the Medical Director of the Stanford Catheterization and Angiography Laboratories. Dake's current research is focused primarily on endovascular device development, vascular biology and molecular imaging. Recent notable investigative work from his laboratory includes published reports on in vivo vascular tissue engineering research.

From 2005 to 2008, Dake was the Chair of the Department of Radiology and the Harrison Distinguished Medical Teaching Professor of Radiology at the University of Virginia Health System in Charlottesville. In addition, he held professorial appointments in the Department of Medicine (pulmonary diseases) and Surgery at the School of Medicine. During this time, he led the development of a new research facility for the department with the construction of the state-of-the-art home for its research division, the Snyder Translational Research Building at the Fontaine Research Park. Dr. Dake initially joined Stanford in 1990 as section chief of Cardiovascular and Interventional Radiology and co-director of the Catheterization and Angiography Laboratories. During his 15 years in that role, his research focused on endovascular device development and management of aortic pathologies. Dake and his team's landmark research into the use of stent-grafts for the treatment of aortic pathologies, which was detailed in two articles published in the *New England Journal of Medicine*, dramatically changed the way physicians manage thoracic aortic aneurysms and dissections.

Notable firsts recorded by the IR team he led while at Stanford include: the first published report of endovascular treatment (catheter-directed thrombolysis and stents) of patients with iliofemoral venous obstruction; publication of the first report of carotid artery stent placement; initial publication detailing the use of venous stents for treatment of benign intracranial hypertension; first aortic stent-graft performed in the US; report of the first series of thoracic aortic stent-grafts for management of thoracic aortic aneurysms and subsequently, acute aortic dissection; first report of stent-graft management of isolated iliac artery aneurysms; first publication to describe the use of covered stents to treat neurovascular arterial disease; initial published experience of vertebral artery stent placement; first report of stent-graft use in patients with femoropopliteal arterial disease; first article to report ascending aortic stent-graft placement; and first paper to describe the placement of an aortic stent-graft within an elephant trunk graft to complete repair of a thoracic aneurysm.

Dake is a graduate of Harvard College, where he was voted First Class Marshall by his graduating class, and Baylor College of Medicine in Houston, where he completed an internship, residency and chief residency year in internal medicine. He pursued fellowship training in pulmonary diseases and a residency and chief residency in radiology at the University of California San Francisco, where he was awarded the Elmer Ng, M.D. Award presented to the outstanding graduating resident in diagnostic radiology. He went on to complete subspecialty training in vascular and interventional radiology at UCSF. Dake has mentored over 100 interventional radiology fellows (including 25 international trainees in research programmes of one year or longer). Five of his trainees have been awarded the annual Gary J. Becker Young Investigator Award by the Society of Interventional Radiology (SIR). In addition to being an advisor to numerous governmental, philanthropic, societal and medical device organisations, he currently serves on the editorial boards of six medical journals.

Dake is the author or co-author of more than 300 peer-reviewed articles and the holder of 31 US patents. He is editor of *Abrams' Angiography*, the current standard reference text in the field. Throughout his career, he has been recognised with many honours and awards. In 1999, the American Heart Association selected him to deliver the Charles T. Dotter Memorial Lecture. In 2004, he was awarded a Doctor Honoris Causa by the French Republic and the Université de la Méditerranée (Aix-Marseille). In the same year, he was honoured with the Outstanding Alumni Award from UCSF, Department of Radiology. He delivered the SIR's Dr. Charles T. Dotter Lecture at its 32nd Annual Scientific Meeting in 2007, received the 2012 SIR Foundation Leaders in Innovation Award and is a 2014 recipient of a Gold Medal, the Society's highest honour given to those who have helped ensure the future of interventional radiology by advancing the quality of medicine and patient care. In 2009, he was named CIRSE's Josef Roesch Honorary Lecturer and in 2014 he was honoured as a Distinguished Fellow by CIRSE. A recipient of Magna and Summa Cum Laude RSNA Scientific Exhibit Awards, he has delivered more than 1,800 invited presentations, including 24 eponymous lectures, and authored 101 book chapters and 812 published abstracts.

DR GILES MASKELL

Dr Giles Maskell is a consultant radiologist at the Royal Cornwall Hospital in Truro. For three years up to September 2016 he was President of the Royal College of Radiologists. In this role, he has been responsible for promoting all aspects of clinical radiology and in particular highlighting to the public and media how patients throughout the UK are disadvantaged by inadequate provision of diagnostic and interventional radiology services.



BSIR GOLD MEDAL

PROFESSOR ANTHONY WATKINSON

BSc (Sheffield) MSc (Oxon) MBBS FRCS FRCR EBIR

Consultant Radiologist
The Royal Devon and Exeter Hospital

Professor of Interventional Radiology
University of Exeter Medical School

Visiting Professor Imperial College London
Department of Biosurgery and Surgical Technology
2006-10

President British Society of Interventional Radiology
2005-7

Council Member Royal College of Radiology
2008-11

Distinguished Fellow of CIRSE 2011

Gold Medal BSIR 2016



British Society of
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Radiology

WATTIE FLETCHER LECTURE

PROFESSOR RICHARD MCWILLIAMS

Richard McWilliams was born in Bangor, Northern Ireland as the last of 8 children. After secondary education in Belfast, Richard studied medicine at Trinity College Dublin qualifying in 1986. This was followed by pre-fellowship surgical training in Salford, Manchester and Chester where his now wife, Marianne, was the junior house officer on the same surgical team.



Richard's radiology training was on the Leeds/Bradford scheme and included two Cook IR fellowships in Hull and Leiden, the Netherlands. He took up his Consultant IR position in the Royal Liverpool Hospital in 1997.

His main area of interest has been vascular intervention particularly aortic work. In 2002 he spent the summer in Perth with David Hartley and Michael Lawrence-Brown researching and developing the technique of in situ graft fenestration and learning complex aneurysm repair. In 2003/2004 the team at the Royal Liverpool performed the first FEVAR and BEVAR in the UK. Richard acted as proctor for standard and fenestrated grafts throughout the UK, Western and Eastern Europe, Lebanon and Canada.

He has been on the council of BSIR and BSET, served on the National Committee on Safety of Devices from 2009-2015 and remains an expert advisor to MHRA, NICE and the NHS HTA programme and has been a clinical advisor to NCEPOD. He is on the editorial board of J EVT and Ultrasound.

He has authored more than 100 Pubmed listed publications and lectured regularly at most of the major IR and Vascular conferences.

He is honorary professor since 2013 in the Department of Molecular and Clinical Cancer Medicine at the University of Liverpool and was also appointed as honorary Professor in the department of Mathematical Sciences in 2016.

Outside of work his main focus is his wife Marianne and three children Ben, Catherine and Owen. His main hobbies are sporting ones, particularly golf and cycling in North Wales or further afield.

GRAHAM PLANT LECTURER

DR ANTHONY NICHOLSON

Former Consultant Interventional Radiologist Hull & East Yorkshire NHS Hospitals Trust and Leeds Teaching Hospitals NHS Trust

Currently Part Time Locum Consultant Hull & East Yorkshire Hospitals
Former President BSIR

Gold Medalist BSIR

Former Dean & Vice President Faculty of Clinical Radiology

RCR Former Program Director CIRSE

Distinguished Fellow of CIRSE

Honorary Fellow Faculty of Radiology Royal College of Surgeons of Ireland.



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FACULTY BIOGRAPHIES

PROFESSOR JEFF GERSCHWIND

Jean-Francois H. Geschwind, MD is the Chairman of Radiology and Biomedical Imaging at Yale School of Medicine, Radiologist in Chief at Yale-New Haven Hospital and also a Professor of Radiology and Oncology at Yale University School of Medicine. Originally from Paris, France, Dr. Geschwind received his medical degree in 1991 from Boston University School of Medicine. He completed his residency training in Diagnostic Radiology at the University of California San Francisco and Fellowship in Vascular and Interventional Radiology in 1998 at the Johns Hopkins University School of Medicine, where he remained on faculty and as the Chief of Vascular and Interventional Radiology since 2002.



Dr. Geschwind is recognized as a key expert in the field of liver cancer and he has focused his research on developing new therapies for liver cancer. He is the author or co-author of more than 400 published manuscripts and abstracts, primarily on subjects dealing with liver cancer, and is also the recipient of numerous national and international awards and grants for his research in this field. As lead or co-investigator on more than 50 clinical trials, Dr. Geschwind's research has been published in many top peer-reviewed journals, including the Journal of Clinical Oncology, Radiology, Hepatology, Clinical Cancer Research, Cancer Research and Annals of Surgery. Dr. Geschwind has edited two books including what is considered the textbook of reference in Interventional Radiology (Abrams'Angiography) and just completed the Second Edition of the first ever textbook on Interventional Oncology.

Dr. Geschwind serves on the editorial board of many journals, and is a consultant to the Editor of Radiology, Deputy Editor of European Radiology as well as a reviewer for numerous radiology, hepatology and oncology journals. He is also the current chairman of the World Conference on Interventional Oncology Board of Directors and is the chair of the Interventional Oncology Lecture Series for the RSNA. He is a Fellow of both the Society of Interventional Radiology (SIR) and the Cardiovascular and Interventional Radiology Society of Europe (CIRSE). He is a member of the Hepatobiliary Task Force of the National Cancer Institute and an active member of the American Association for Cancer Research, the American Society of Clinical Oncology, the International Liver Cancer Association, the Radiological Society of North America, the Society of Interventional Radiology and the Cardiovascular and Interventional Radiology Society of Europe. Dr. Geschwind is a Diplomate of the American Board of Radiology.

DR JAFAR GOLZARIAN

Clinical Interests:

- Diagnostic Radiology
- Endovascular venous ablation
- GI bleeding
- Hepatocellular carcinoma
- Imaging sensitivity and specificity
- Interventional treatment of Peripheral artery disease
- Prostate artery embolization
- Transjugular liver biopsy
- Varicocele embolization

Medical School

- University of Brussels, Brussels, Belgium

Residency

- Erasme Hospital, Brussels, Belgium

Fellowship

- Erasme Hospital, Brussels, Belgium

Board Certifications

- American Board of Radiology

Leadership Roles and Memberships

- Member, European Congress of Radiology
- Member, Radiological Society of North America
- Member, Society of Interventional Radiology



FACULTY BIOGRAPHIES

DR MARC SAPOVAL

Dr. Marc Sapoval received his medical degree from Paris Bicetre University, and his PhD from Paris Bicetre University. He completed his diagnostic residency at Various Radiological department in Paris and an interventional radiology fellowship at Institut Gustave Roussy for 1 year and Broussais Hospital for 4 years.

He was appointed Professor of radiology in 1997 and head of the Vascular and oncological Interventional Radiology of Hopital Européen Georges Pompidou in 2004.

Dr. Sapoval is Fellow of the CIRSE, was responsible of the scientific program of the Cirse congress for 2 years and co-founded the GEST meeting in 2007.

He has authored 160 papers, over 200 abstracts, and delivered over 100 invited lectures. He currently serves as a reviewer for Eur Radiology, CVIR, Diagnostic and Interventional imaging, JACC, JVIR.



FACULTY LISTS

BSIR FACULTY:

Dr Ifran Ahmed	St Thomas' Hospital London
Dr Des Alcorn	Gartnavel General Hospital Glasgow
Dr Zaid Aldin	Princess Alexandra Hospital Essex
Dr Alex Barnacle	Great Ormond Street Hospital, London
Dr Jonathan Bell	The Christie Manchester
Dr Philip Borg	The Christie Manchester
Dr David Breen	Southampton General Hospital
Dr Timothy Bryant	Southampton General Hospital
Professor Timothy Buckenham	Melborne Australia
Dr Nick Burfitt	Imperial College, London
Dr Sam Byott	BSIRT
Dr Sam Chakraverty	Ninewells Hospital Dundee
Dr Alex Chapman	Ashford & St Peter's Foundation Trust Guilford
Dr Trevor Cleveland	Sheffield Vascular Institute, Sheffield
Ms Jill Cockrill	Senior Case Mix Officer
Dr Neil Davies	Royal Free Hospital, London
Mr Owen Dickinson	Northern General Hospital, Sheffield
Dr Steve D'Souza	Preston Royal Infirmary
Mr Derek Edwards	The Christie NHS Foundation Trust, Manchester
Dr Jonathan Evans	Royal Liverpool University Hospitals, Liverpool
Dr Finn Farquharson	Manchester Royal Infirmary
Dr Nicos Fotiadis	Brompton Hospital
Dr Andrew Gordon	University Hospital of Wales
Dr Alison Graham	Imperial College, London
Dr Said Habib	Nottingham University Hospitals
Dr Nigel Hacking	Southampton General Hospital, Southampton
Dr Julian Hague	University College Hospital London
Dr Mohamad Hamady	Imperial College, London
Dr Chris Hammond	Leeds Teaching Hospitals
Dr John Hardman	Royal United Hospitals Bath
Dr Phil Haslam	Freeman Hospital, Newcastle
Dr Andrew Hatrick	Frimley Park Hospital, Surrey
Dr Bella Hausen	BSIRT
Dr Ralph Jackson	Freeman Hospital, Newcastle
Dr Ounali Jaffer	Royal London Hospital
Dr Craig Jobling	City Hospital, Nottingham
Dr Malcolm Johnston	Brighton & Sussex University Hospitals
Dr Narayan Karunanithy	Guys & St Thomas' Hospital London
Professor John Karani	Kings College Hospital London
Dr Erika Kashef	St Marys Hospital London
Dr Ram Kasthuri	Gartnavel General Hospital, Glasgow
Dr Nabil Kibryia	Royal Liverpool University Hospitals, Liverpool
Dr Darren Klass	Vancouver
Dr Dan Kusama	Northern General Hospital, Sheffield
Dr Hans-Ulrich Laasch	The Christie NHS Foundation Trust, Manchester
Dr Raghuram Lakshminarayan	Hull Royal Infirmary
Dr Peter Littler	Freeman Hospital, Newcastle
Professor Mike Lee	Beaumont Hospital Dublin
Dr Deborah Low	Royal London Hospital
Professor Derrick Martin	Manchester
Dr Ian McCafferty	Queen Elizabeth Hospital Birmingham
Dr Fiona Miller	Peterborough General Hospital
Dr Damian Mullan	The Christie NHS Foundation Trust, Manchester
Dr Jonathan Oakes	Royal Bournemouth Hospital
Dr Liz O'Grady	University Hospital of Aintree Liverpool
Dr Sarah O'Shea	Manchester Royal Infirmary
Dr Anthie Papadopoulou	The Royal Free Hospital London
Dr Sapna Puppala	Leeds Teaching Hospitals
Dr Rubeeza Razaq	Bolton Royal Infirmary
Dr Mark Regi	Northern General Hospital, Sheffield

FACULTY LISTS

Dr Peter Riley	Queen Elizabeth Hospital Birmingham
Dr Graham Robinson	Hull Royal Infirmary
Dr Angela Rogers	Royal Cornwall Hospital
Dr Tarun Sabharwal	Guy's & St Thomas' Hospital, London
Dr Teik Choon See	Addenbrookes Hospital, Cambridge
Dr Nadeem Shaida	Addenbrookes Hospital, Cambridge
Dr Brian Stedman	Southampton General Hospital, Southampton
Dr Rob Stockwell	Chorley & South Ribble DGH
Dr Sam Stuart	Great Ormond Street Hospital, London
Dr Robert Thomas	Imperial College, London
Dr David Thompson	University Hospitals of South Manchester
Dr Raman Uberoi	John Radcliffe Hospital, Oxford

INVITED FACULTY:

Dr Nicola Strickland	President of RCR
Professor John Valabhji	National Clinical Director for Obesity & Diabetes NHS England
Mr Kevin Varty	Consultant Vascular Surgeon Addenbrookes Hospital Cambridge
Dr Konstantinos Katsanos	IR Guys & St Thomas' University Hospital London
Professor W Gedroyc	Imperial College Hospital London
Professor Geert Maleux	University Hospital Leuven
Professor John O'Grady	Kings College Hospital
Dr Pauline Kane	Kings College Hospital London
Dr Ranan Das Gupta	Imperial College Hospital London
Professor Guang-Zhong Yang	Imperial College Hospital London
Miss Emma Beddow	Consultant Thoracic Surgeon Harefield Hospital
Dr Merina Ahmed	Royal Marsden Hospital
Mr Paras Dalal	Consultant Cardio-Thoracic Radiologist Harefield Hospital
Dr Damien Taylor	Hull Royal Infirmary
Dr Mike Platts	Imperial College Hospital London
Dr Iqbal Malik	Consultant Cardiologist and Honorary Senior Lecturer, Director of Quality and Governance for Surgery, Cancer, Cardiovascular Medicine, Hammersmith Hospital
Ms Jill Cockrill	National Case Mix Office
Mr Andrew Davies	Direct Market Access ABHI
Mr Derek Edwards	The Christie Manchester
Dr Rutger Lely	VU University Medical Centre Amsterdam Netherlands
Dr Chris Rowland - Hill	BSNR
Dr Peter Flynn	BSNR
Dr Rob Lenthall	BSNR
Dr Norman McConchie	BSNR
Dr Javaid Iqbal	Imperial College Hospital London
Dr David Houdra	
Dr Paul McCoubrie	North Bristol NHS Trust

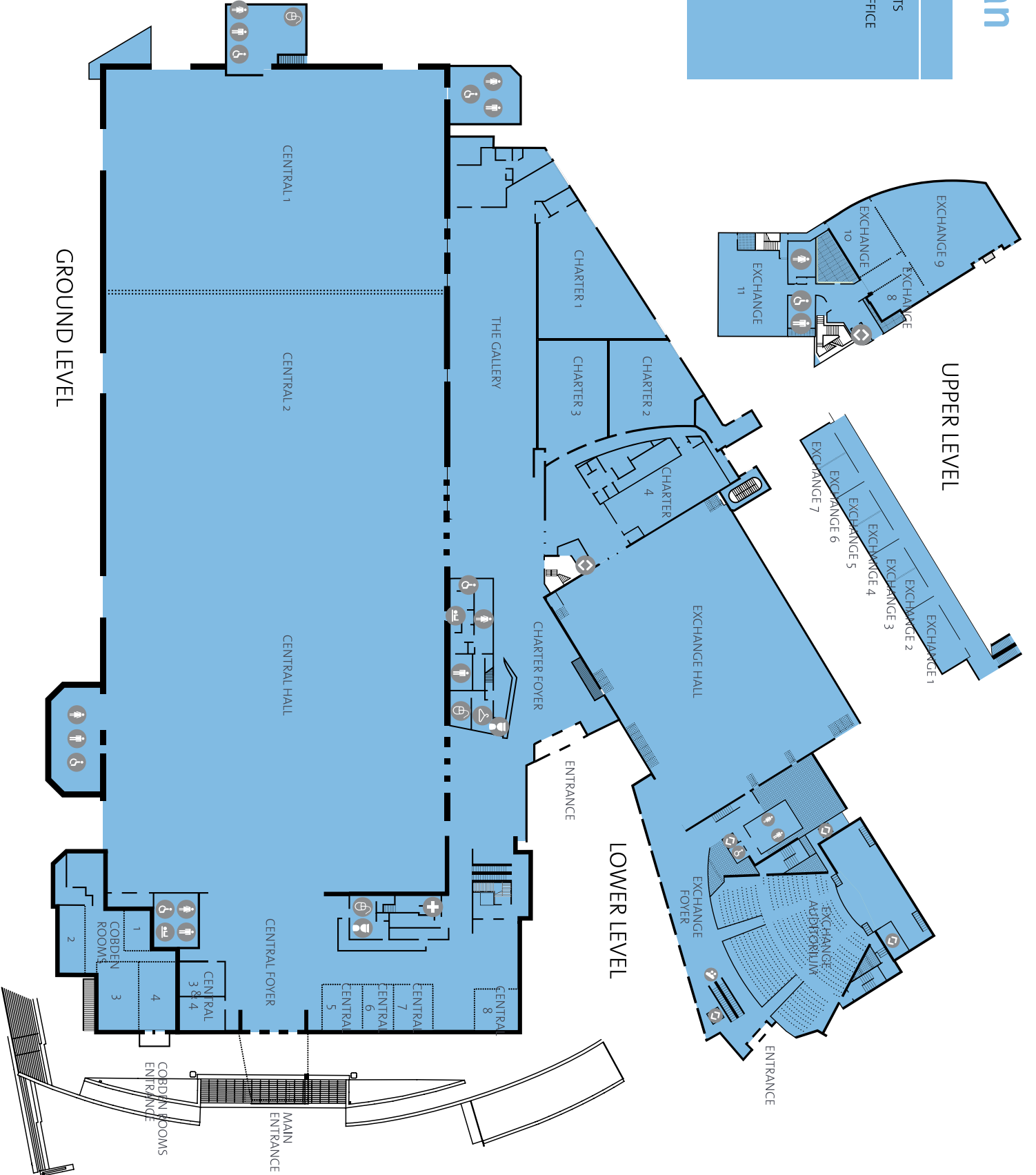
INDUSTRY FACULTY

Dr Parag Patel	Froedtert Hospital and Medical College of Wisconsin
Dr Shahzad Ilyas	St Thomas' Hospital
Dr Ruben Lopez Benitez	Switzerland
Dr Palena A	bbott Vascular
Dr. Homoyoon Mehrzad	QE Birmingham
Dr Stephen Kam	Medtronic
Dr. Camillo Aliberti	Padova

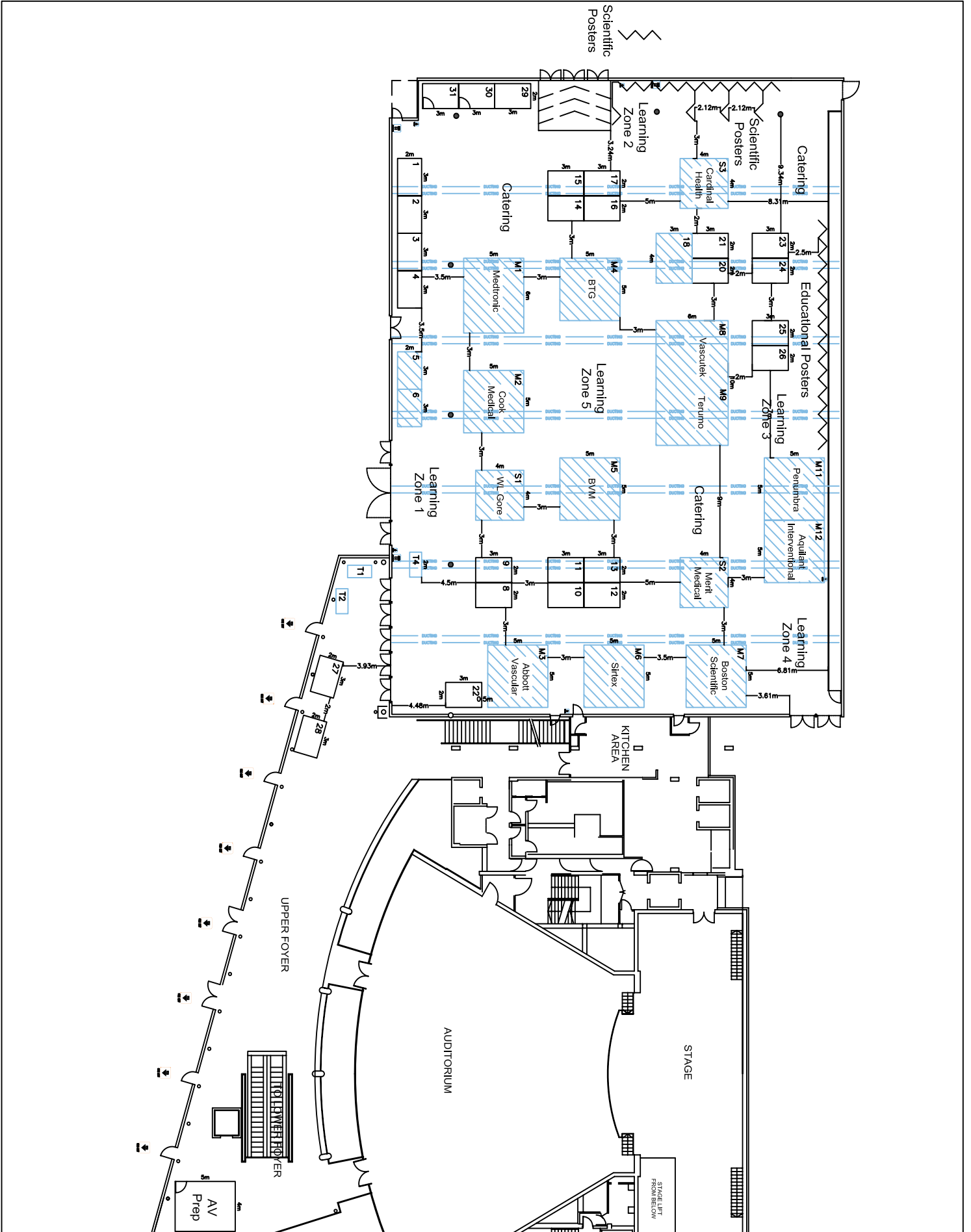
EXHIBITION PLAN

Site plan

Key	
	TOILETS
	ORGANISERS' OFFICE
	FIRST AID
	ESCALATORS
	LIFT
	CONGERGE
	CLOAKROOM
	BABY CHANGE



EXHIBITION PLAN



LIST OF EXHIBITORS

MAJOR SPONSOR

Aquilant Interventional	M12
Cook Medical	M2
Abbott Vascular	M3
Terumo	M8
Vascutek	M9
BVM	M5
Sirtex	M6
Boston Scientific	M7
Penumbra	M11
Medtronic	M1
BTG	M4

ADDITIONAL SPONSORS

WL Gore	S1
Merit Medical	S2
Cardinal Health	S3
CIRSE	1
Frontiere Medicale	22
Medac	15
Care Fusion	12
Bard	18 & 19
Delcath	17
Vascular Perspectives	5 & 6
Seimens Healthcare	20
Spectranetics	2
Vygon	16
APC Cardiovascular	4
Manatech	9
Bolton Medical	21
St Jude Medical	13
ALN	10
Macromed	11
Phillips Volcano	23
Endologix	14
Toshiba Medical	8
GE Healthcare	29
Angiodynamics	25
MHRA	26
Lombard Medical	24
Interventional News	3
Mermaid Medical	TT4
Flen Healthcare	TT3
Dendrite Clinical Systems	Foyer
Tonic PR	Foyer
BSIRT	Foyer
SIRNR	Foyer
NVR (Registry)	Foyer
BASIL 111 Trial	Foyer

Offering a full range of ablation technologies.
 Providing the right options for patients.



VISIT US AT
 BOOTH #25



Coming Soon!

Disruptive technology at the cutting edge - go.angiodynamics.com/disruptive



INDICATIONS FOR USE: The Habib 4X is intended to be used to assist in coagulation of tissue during intraoperative surgical procedures. The StarBurst Talon, StarBurst Xli-enhanced, StarBurst XL, StarBurst MRI and StarBurst SDE Electrosurgical Devices are tools to transmit radiofrequency energy (provided by the 1500X RF Generator) in conjunction with the IntelliFlow Infusion pump. They are indicated for use in percutaneous, laparoscopic, or intraoperative coagulation and ablation of soft tissue including the partial or complete ablation of non-resectable liver lesions and palliation of pain associated with metastatic lesions involving bone in patients who have failed or are not candidates for standard pain therapy. The Accu2i pMTA Applicator with Sulis VpMTA Generator Software release 2.1.0 is indicated for intraoperative coagulation of soft tissue. The NanoKnife System is cleared in the United States for surgical ablation of soft tissue. It has not been approved for the treatment or therapy of any specific disease state. Indications, contraindications, warnings, precautions and instructions for use can be found in the Instructions for Use supplied with each device. Observe all instructions prior to use. Failure to do so may result in patient complications. CAUTION: Federal (USA) law restricts the sale of this device by or on the order of a physician.

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EXHIBITION PROFILES - MAJOR

ABBOTT VASCULAR

Abbott Vascular, a division of Abbott, is a global leader in vascular and cardiac care with market-leading products and an industry-leading pipeline. Headquartered in Northern California, we are committed to advancing patient care by transforming the treatment of vascular disease through medical device innovations, investments in research and development, and physician training and education.



We offer cutting-edge devices for coronary artery disease, peripheral vascular disease, carotid artery disease and structural heart disease. Our comprehensive product portfolio includes the Xience PRIME drug eluting stent system, self expanding and balloon expanding bare metal stents, balloon catheters, guide wires and vessel closure devices.

AQUILANT INTERVENTIONAL

Aquilant Interventional provide innovative, minimally invasive Vascular & GI Products to enable clinicians to deliver better patient outcomes.



We provide a bespoke consultative service through education & clinical support, offering treatment options with niche products that reduce re-intervention rates, increase efficiency and generate improved outcomes for the patient, clinicians and Trusts'

BOSTON SCIENTIFIC

Boston Scientific (NYSE: BSX) transforms lives through innovative medical solutions that improve the health of patients around the world.



- We are dedicated to transforming the lives of patients by advancing the diagnosis and treatment of peripheral vascular disease and liver cancer with innovative technologies.
- We are the global market leader in peripheral interventions and offer healthcare providers the broadest portfolio of solutions for peripheral interventions.
- We offer a complete set of flow restoration technologies to treat the lower extremities, including crossing devices, atherectomy systems and thrombectomy devices, designed to help physicians save the lives and limbs of more patients.
- We help physicians treat and manage liver cancer, with tumour ablation technologies and drainage systems.
- We offer a broad portfolio of stents, balloons and guidewires designed to help physicians optimize blood flow in the more than 27 million people who suffer from peripheral artery disease worldwide.
- We provide healthcare systems with highly differentiated peripheral embolization systems, including detachable coils, microcatheters and other embolic technologies
- As a global medical technology leader for more than 30 years, we advance science for life by providing a broad range of high performance solutions that address unmet patient needs and reduce the cost of healthcare. For more information, visit us at www.bostonscientific.com.

EXHIBITION PROFILES - MAJOR

BTG

At BTG we are focused on bringing to market innovative products in specialist areas of medicine to better serve doctors and patients. Our growing portfolio of Interventional Medicine products is designed to advance the treatment of cancer, severe emphysema, severe blood clots and varicose veins, while our Specialty Pharmaceuticals portfolio offers antidotes that alleviate toxicity and treat rare conditions. Healthcare is constantly evolving – so BTG never stands still. Inspired by a deep understanding of our customers' needs, we're working to meaningfully improve the lives of patients and their healthcare experience.



Our competitive advantage is our dedication to finding smart, often unconventional solutions to complex medical problems. Many of our products combine medicines, device technology and new techniques in order to deliver more targeted treatments. We also invest in the clinical evidence to help demonstrate the value of our products to doctors, patients, and healthcare systems.

Doing what's right for patients is what gets us to work in the morning. It's part of our DNA. By staying true to this principle and our values, we've earned a strong reputation for the quality of our products and our commitment to innovation.

Whether developed in our own labs or in partnership with clinicians, academics and other companies, we believe passionately that medical innovation has the power to improve human health.

Imagine where we can go.

BVM MEDICAL

BVM is delighted to be back here in Manchester for this year's BSIR. Approaching 30 years now, we have been delivering innovative and advanced products to the UK market with 24 hour clinical support.



This year, we maintain our focus on oncology and in particular RF Ablation for benign thyroid nodules. With our Korean partners, RF Medical, we are not only able to offer you, our intelligent, automated, algorithm based radiofrequency tumour ablation system for lung, liver, kidney & bone but we can also safely ablate benign thyroid nodules. We continue to work with our German partners Pflugbeil, who manufacture unique ascites, percutaneous biliary & obstructed bile duct drainage catheters as well as a range of biopsy needles.

We are also delighted this year to introduce our new partner – CardioNovum who manufacture the LegFlow RX/OTW paclitaxel releasing peripheral balloon dilation catheter and the Aperto OTW paclitaxel releasing high pressure shunt balloon dilation catheter. We are delighted to continue our partnership with Embocept which is a very versatile temporary embolic agent that can be used to deliver a wide range of chemotherapy drugs in TACE procedures. In addition to the above exiting range of products, we will be discussing the new innovations coming from S&G and the EGIS range of G.I stents.

Our workshop this year, focus on both RF Ablation of benign thyroid nodules and biliary intervention for hilar strictures.

Tuesday 15th November – 12:30-13:00 - 'Biliary Intervention for Hilar Strictures.'

Dr. Hans-Ulrich Laasch, MRCP, FRCR, Head of Interventional Radiology, The Christie NHS Foundation Trust

Wednesday 16th November – 13:30-14:00 - 'Radiofrequency Ablation of Benign Thyroid Nodules.'

Dr. Camillo Aliberti, Via Gattamelata, 64, 35128 Padova

We look forward to seeing you during the meeting. We hope you can attend our workshop and that we can share with you some more information on our products.

BVM Medical Ltd: Tel: 01455 614555, www.bvmmedical.com

EXHIBITION PROFILES - MAJOR

COOK MEDICAL

A global pioneer in medical breakthroughs, Cook Medical is committed to creating effective solutions that benefit millions of patients worldwide. Today, we combine medical devices, drugs, biologic grafts and cell therapies across more than 16,000 products serving more than 40 medical specialties. Founded in 1963 by a visionary who put patient needs and ethical business practices first, Cook is a family-owned company that has created more than 10,000 jobs worldwide. For more information, visit www.cookmedical.com.



Cook Medical, O'Halloran Road, National Technology Park, Limerick, Ireland.
Phone: +353 61 334440, Fax: +353 61 334441, www.cookmedical.com

MEDTRONIC

During the six decades of Medtronic's existence, our Mission has remained the same: to alleviate pain, restore health and extend life for people around the world. We have worked hard to be at the forefront of medical device innovation, challenging ourselves to develop high-quality therapies that positively impact people's lives. We have accomplished a lot – today more than 62 million people benefit from our technologies each year, equating to two people every second. But the nature of today's healthcare problems requires a new approach. Governments, insurers, hospitals, patients, and other participants in the healthcare system are looking for better value.



At Medtronic, we believe that our technologies, the data and insights they create, and our expertise can be combined in partnership with hospitals, payers and governments to help create aligned, value-based healthcare models that can deliver better patient outcomes – while maintaining or reducing costs.

At Medtronic, we are committed to accelerating the development of meaningful innovations for patients – innovations that add real value in better patient outcomes at appropriate costs, lead to enhanced quality of life, and can be validated by clinical and economic evidence. This year alone we have invested US\$1.5 billion in research and development to bring meaningful innovations to market. And we're not just thinking about this at the product level, we're developing innovations for the therapy, procedure and system levels.

Join us as we go Further, Together.

PENUMBRA

Penumbra, Inc., headquartered in Alameda, California is a global interventional therapies company that designs, develops, manufactures and markets innovative medical devices. The company has a broad portfolio of products that address challenging medical conditions and significant clinical needs across two major markets, neuro and peripheral vascular. Penumbra sells its products to hospitals primarily through its direct sales organization in the U.S., most of Europe, Canada and Australia, and through distributors in select international markets.



Indigo System - Indigo System is a continuous aspiration thrombectomy device, indicated for removal of clots from peripheral arteries and veins. The Indigo catheter's increased lumen size, advanced tracking properties and catheter directionality paired with continuous vacuum from the Penumbra Pump MAX aspiration pump allows for the efficient evacuation of clot. The proprietary Indigo Separator technology enables unobstructed aspiration for the duration of the procedure.

Ruby Coil and POD System - Ruby Coil and POD System utilize Penumbra's large volume coil technology allowing embolization of complex lesions with fewer devices. The multiple softness levels of Ruby Coil allow physicians to densely pack aneurysms and confidently occlude vessels. The anchoring and packing segments of POD allow physicians to easily anchor and densely occlude vessels in high flow anatomy without the risk of coil migration. Both Ruby Coil and POD System are high-flow microcatheter compatible and are best delivered through the LANTERN microcatheter.

Product availability varies by country. Penumbra, the Penumbra logo, Indigo, Ruby and POD are registered trademarks of Penumbra, Inc., in the U.S. and other countries.

Penumbra European Office Contact:

Ms. Alexandra Moffat, Penumbra Europe GmbH, Am Borsigturm 44, 13507 Berlin, Germany, +49 30 2005 676-0

EXHIBITION PROFILES - MAJOR

SIRTEX



Sirtex Medical is actively engaged in the field of liver-directed therapies for cancer patients. The innovative technology of Sirtex, SIR-Spheres® Y-90 resin microspheres (microscopic Yttrium-90 resin beads), is a medical device used in interventional oncology to deliver Selective Internal Radiation Therapy (SIRT), also known as radioembolisation, to the liver. This treatment for inoperable liver cancer delivers high doses of radiation directly to the site of tumours whilst conserving normal liver parenchyma. SIR-Spheres® Y-90 resin microspheres were approved in 2002 for use in the treatment of a variety of unresectable liver tumours as well as in hepatocellular carcinoma within the European Union under a CE Mark. They are presently used at 300+ institutions in Europe and over 61,000 doses of SIR-Spheres® microspheres have been supplied worldwide.

The SIRFLOX study evaluated the efficacy and safety of adding SIR-Spheres® Y-90 resin microspheres to a current first-line systemic chemotherapy in patients with non-resectable colorectal liver metastases. SIRFLOX is the largest randomised interventional radiology study ever conducted in oncology and has been published in February 2016 in the Journal of Clinical Oncology, the most widely read prestigious official journal of the ASCO.

Overall survival (OS) data remain an important determinant of the integration of SIR-Spheres® Y-90 resin microspheres into first-line therapy and the combined SIRFLOX/FOXFIRE/FOXFIRE Global studies are expected to report OS data mid-2017.

New data on Hepatocellular Carcinoma coming soon involving more than 1,200 patients. For more information visit us at our booth # M6.

TERUMO



Terumo is committed to contributing to society through healthcare. Our mission is delivering complete solutions allowing physicians to successfully perform all types of interventional procedures safely, quickly, and effectively. As part of our contribution, Terumo offers Innovation through Education; educational workshops for healthcare professionals tailored to end users requirements. Details available from the Terumo stand.

Peripheral Intervention: Terumo solutions include RoadSaver®, a dual mesh carotid stent and Senri® - a low profile balloon 0.018"; both rapid exchange design. In addition, the Tercross® - 0.014" high pressure, non-compliant OTW balloon; unique hybrid wire Guidewire Advantage®; Navicross® support and crossing catheter provide the optimal solution for challenging lesions. Additions for 2016 are 2 new over the wire balloons; Metacross 0.035" and Crostella 0.018".

Peripheral Interventional Coiling: Terumo offer the AZUR® Peripheral HydroCoil® (available as Pushable and Detachable) which work in synergy with high performance catheters (Radifocus Glidecath®) and our Progreat® microcatheter including recent range extension, all supported with the Terumo guidewires and access tools. 2016 sees the introduction of Azur CX 018" complex configuration detachable coil. New versions of Progreat® for 2016 a 2.0 Fr. microcatheter; angled tip version for complex anatomies also a dual marker version for optimal visibility. Interventional Oncology: Terumo's Progreat® range of microcatheters assist in the delivery of bland embolics, SIRT and now may be effectively combined with Terumo's new drug eluting microsphere, LifePearl® working for physicians to deliver a range of minimally invasive treatments to cancer patients.

To date over 1100 patients have been treated with LifePearl®,. CIRSE 2016 saw the launch of the CIREL Registry (CIRSE Registry for LifePearl Microspheres) with enrolment commencing before the end of 2016. Terumo is pleased the CIRSE organization decided to use LifePearl (Terumo) as exclusive loadable embolic in this research. The primary endpoint of CIREL registry is to map the indications where, in the complex algorithm of liver predominant mCRC treatment, loco regional therapy with loadable embolic may be applied. The CIREL Registry is supported by a grant provided by Terumo Europe.

VASCUTEK



VASCUTEK Ltd, is a world leader in the design and manufacture of products that address the needs of vascular and cardiovascular clinicians.

For over 30 years, Vascutek has applied advanced and innovative technologies to develop a wide portfolio of products for peripheral, abdominal and cardiothoracic surgery. These include the Anaconda™ AAA stent graft system, custom Fenestrated Anaconda™ and the Thoraflex™ Hybrid FET device.

EXHIBITION PROFILES - GENERAL

ALN

ALN is one of the leaders in its field with its ALN optional vena cava filter. This filter is well known in Europe for more than 20 years and is present for long on international markets including USA.

PRODUCTS:

ALN Optional vena cava filter with Hook
ALN Optional vena cava filter without Hook
Retrieval systems of the ALN filter including the 2in1 device

CE Mark & FDA approved (2008)
Proven effectiveness
Retrieval after long placements (over 40 months)
1 Retrieval at 12 years



APC CARDIOVASCULAR

Formed in 1989, APC Cardiovascular is a successful and well-respected healthcare distribution company. Committed to providing the medical profession with a range of high quality products incorporating the latest technological advances, backed by the highest level of customer service and support. Our team pride themselves on developing successful relationships by building mutual trust and respect, encouraging close co-operation, and placing customers' needs first.



We are exhibiting new peripheral stent and balloon catheters from Qualimed, Lite Tech radiation protection garments, Proguard Gloves and RADPAD® drapes to protect the operator during various Interventional procedures.

To find out more please visit our stand or visit our website www.apccv.com

BARD

For more than 100 years C. R. Bard has been developing innovative medical devices that meet the needs of healthcare professionals and patients. Today we are a global leader in the medical device industry and are committed to enhancing the lives of people around the world. With our UK headquarters based in West Sussex, our four divisions focus their efforts around the disease areas of: Vascular, Urology, Oncology, Surgical Specialties.



The Peripheral Vascular Division offers Surgical and interventional devices for peripheral vascular patency. This includes an extensive range of PTA balloon catheters including our hydrophilic Ultraverse range for distal angioplasties to ATLAS® GOLD, Bard's large diameter high pressure balloon, the LUTONIX® Drug coated balloon catheters, Balloon and self expandable stents, venous and covered stents, CTO devices and Vena cava filters.

BOLTON MEDICAL

Bolton Medical is a subsidiary of the WerfenLife Company. WerfenLife is a global company that manufactures and distributes medical diagnostic solutions and medical devices worldwide.



INSPIRED by a belief that quality designs lead to a better quality of life,
DRIVEN by a passion and respect for the aortic anatomy,
COMMITTED to crafting advanced aortic endovascular solutions for every patient,

Bolton Medical's vision is to become the leading provider of endovascular solutions for aortic disease. Headquartered in the US, Bolton Medical improves the quality and safety in patient care by developing, manufacturing, and distributing innovative, high quality products and technology solely focused on the aorta.

EXHIBITION PROFILES - GENERAL

CORDIS - A CARDINAL HEALTH COMPANY



Cordis, A Cardinal Health Company, is a leader in the development and manufacture of interventional vascular technology with a more than 50-year history of delivering pioneering products to treat millions of patients worldwide. Cordis and Cardinal Health have the opportunity to better serve our customers and improve patient care by strengthening our product portfolio, enhancing our overall service model and business innovation, and building on our established customer relationships.

Cordis' products and solutions for the endovascular suite aim to reduce the cost and complexity of endovascular healthcare, without compromising clinical outcomes. Our endovascular portfolio is comprised of Sheaths, Access Accessories, Diagnostic Guidewires, Crossing and Re-Entry Devices, Diagnostic Catheters, Steerable Guidewires, Guiding Catheters, PTA Balloons, Specialty Balloons, Self-Expanding Stents, Balloon Expandable Stents, Vena Cava Filters, and Vascular Closure Devices.

We look forward to meeting with you at BSIR to share & discuss latest developments & INCRAFT® AAA Stent Graft System showing you how it has performed in a multitude of procedures.

Cordis, a Cardinal Health Company
Regus Aston Court, Kingsmead Business Park, High Wycombe, Buckinghamshire, HP11 1JU
Tel. 01494 616309
Website: www.cordis.com/emea

CAREFUSION



At CareFusion, we are united in our vision to improve the safety and lower the cost of healthcare for generations to come. Our employees are passionate about healthcare and helping those that deliver it. Our Interventional Specialties portfolio includes a range of clinically proven product families such as the PleurX® catheter system for compassionate home-management of recurrent pleural effusion and malignant ascites, Achieve® and Temno™ soft tissue biopsy devices, and the Safe-T-Centesis® drainage system for thoracentesis and paracentesis.

Other products in our innovative portfolio include the Czech manufactured Ella G.I. stent range including the BD (BioDegradable) stent and Neo-Hydro range of nephrostomy and biliary drainage products from Bioteq.

Tel No: +44 (0)114 268 8880
Fax No: +44 (0)114 268 8881
Email: IS-sales@carefusion.com
Website: www.carefusion.co.uk/our-products/interventional-specialties

CIRSE



The Cardiovascular and Interventional Radiological Society of Europe (CIRSE) is a non-profit, educational and scientific association aiming to improve patient care through the support of teaching, science, research and clinical practice in the field of cardiovascular and interventional radiology.

Join us in Copenhagen from September 16-20, 2017.

www.cirse.org

EXHIBITION PROFILES - GENERAL

DEL CATH SYSTEMS

Delcath Systems, is a specialty pharmaceutical and medical device company focused on oncology. Our proprietary product- the Delcath Hepatic Delivery System for use with Melphalan Hydrochloride -is designed to administer high dose chemotherapy to the liver, while controlling systemic exposure"



DENDRITE CLINICAL SYSTEMS

Dendrite Clinical Systems is a world leader in endovascular and interventional radiology database software for hospital departments, as well as national and international registries. The company's client base extends across over 250 hospitals and over 160 national and international databases, in 40+ different countries.



The company hosts numerous registries for the BSIR including: the British Society of Radiology Iliac Angioplasty and Stent Register (BIAS II), the Biliary Drainage and Stent Registry, the Registry of Oesophageal Stenting and the IVC Filter Registry. Please visit the Dendrite booth to register your interest for these databases and for a quick training session.

For further information please contact:

Dendrite Clinical Systems, The Hub, Henley-on-Thames, Oxfordshire, RG9 2BA, United Kingdom
Phone: 01491 411 288, Fax: 01491 411 399, Web: www.e-dendrite.com, Email: info@e-dendrite.com

ENDOLOGIX

Endologix, Inc. is uniquely positioned to offer vascular specialists the range of abdominal aortic aneurysm products and services they need to confidently treat more patients more effectively. We develop and manufacture a comprehensive set of minimally invasive aortic solutions. Designed around key challenges including access, challenging anatomies and aneurysm sealing, our products have delivered excellent patient outcomes. We work closely with vascular specialists, actively partnering with them to improve patient care. When it comes to ensuring patient wellbeing, we are never satisfied with the status quo.



FRONTIÈRE MÉDICALE

Frontière Médicale specialises in European commercialisation of new and innovative technologies. We have focused portfolio within Venous/Vascular for deep venous, superficial venous, and arterial interventions. Our brands include the Veniti Vici Venous Stent & Jeti Thombectomy device. We also have a complete portfolio of RF & Laser applications for varicose veins. In September our company delivered another first, by launching Stentys BTK; the only dedicated DES for BTK interventions for patients with CLI.



We look forward to welcoming you.

GE HEALTHCARE

GE Healthcare are pleased to welcome delegates to this year's BSIR Meeting. Come and visit us on the GE Booth #29 for our latest innovations.



GE Healthcare provides transformation medical technologies and services to meet the demand for increased access, enhanced quality and more affordable healthcare around the world. From medical imaging, software & IT, patient monitoring and diagnostics to drug discovery, biopharmaceutical manufacturing technologies and performance improvement solutions, GE Healthcare helps medical professionals deliver great healthcare to their patients.

For further information, please contact us www.gehealthcare.com/moreinformation

EXHIBITION PROFILES - GENERAL

LOMBARD MEDICAL

Lombard Medical provides endovascular devices to treat AAAs. Aorfix™, an endovascular stent graft, has global approval to treat patients with the broadest range of AAA anatomies. The Altura™ endograft system, currently only CE marked, is an ultra-low profile device offering a simple and predictable solution to treat standard AAA anatomies.



MACROMED

Macromed's portfolio continues to evolve delivering class leading emerging technologies into the UK interventional practice improving the clinical outcome for patients and to the benefit of clinicians alike.



Please visit our stand to learn more about new products which include the unique BeGraft Aortic large diameter balloon expandable covered stent graft and the Andramed vascular portfolio. These exciting new technologies join our better established product lines such as the Uventa self-expanding ureteral stents and ALN IVC filter.

Macromed can genuinely offer the added value facilities and depth of scope associated with a multinational company combined with the customer focus, flexibility, and top level service of a smaller independent UK based organisation.

MANA-TECH

Mana-Tech will be demonstrating over-the wire deployment of the Option IVC filter. Clinicians are finding that there are major advantages using this method for a femoral placement, as the filter apex is stabilised for precise and predictable positioning in the IVC. We will also be showing the 'Atrieve' Triple Loop Vascular Snare Kit and the 'Cleaner' mechanical thrombectomy device - the only wall-contacting rotational thrombectomy system indicated for use in the peripheral vasculature.



Other products displayed include the the T-Lab Trans-Jugular liver biopsy system with patented 'Flexcore' technology to provide superior steerability and sample quality. For percutaneous liver biopsy we provide the Biopince. The Biopince is a unique 'full-core' device that provides 59% more tissue volume than conventional side-notch instruments.

MEDAC

Medac is an innovative German pharmaceutical company with a well-established reputation and experience in oncology, fibrinolysis, haematology and rheumatology. We are specialists offering a broad spectrum of products from standard cancer chemotherapy to niche speciality medicines. We provide high quality products and seek innovative solutions to your therapeutic problems.



Recently we launched an improved version of the first licensed range of pre-filled syringes of methotrexate for use in rheumatoid arthritis. Medac understands your issues and requirements and is dedicated to providing prompt and intelligent responses to your requests. Find out more at www.medacuk.com

EXHIBITION PROFILES - GENERAL

MERIT MEDICAL SYSTEMS



Merit Medical Systems, Inc. has been a global leader in the development, manufacturing, and distribution of proprietary disposable and implantable medical devices for almost 30 years. Merit Medical has built a reputation for introducing and marketing innovative, high-quality products designed to enhance the practice of interventional medicine.

From access to hemostasis, Merit Medical offers an integrated suite of interventional products designed specifically to help you optimize the efficiency of your procedures. Merit's extensive product portfolio includes the newly launched SwiftNINJA™ Steerable Micro catheter, designed for super selective micro catheter insertion without the use of a guidewire with contrast injection.

Our vision is to be the most customer-focused company in healthcare. We are determined to understand our customers' needs, provide cutting edge innovations, and deliver products that improve lives.

Visit Merit Medical at booth n. S2 to learn about our featured products and visit our website, www.MeritEMEA.com.

MERMAID MEDICAL



Mermaid Medical is delighted to be sponsoring the BSIR Annual Meeting again this year. Mermaid Medical is a Worldwide medical devices company which specialises in the distribution of several world-leading single-use devices.

We have the following new products, available for viewing on our stand.

- Co2mmander co2 delivery system. The only fully portable co2 unit and gas providing a real option to contrast in patients with contrast allergy or nephropathy.
- BioSentry Lung Tract Sealant System. Discharge your lung biopsy patients one hour post biopsy.
- CASSI Rotational Full-Core Breast Biopsy System using co2 to access areas difficult to navigate with conventional devices.
- For 2017 D-Clot Rotational Thrombectomy Device.

We look forward to welcoming you to Stand T4.

SIEMENS HEALTHCARE LTD



Siemens Healthcare Ltd is one of the world's largest suppliers to the healthcare industry and a trendsetter in medical imaging, laboratory diagnostics and medical information technology. Siemens offers its customers products and solutions for the entire range of patient care from a single source – from prevention and early detection to diagnosis, and on to treatment and aftercare. By optimising clinical workflows for the most common diseases, Siemens also makes healthcare faster, better and more cost-effective. For further information please visit www.siemens.co.uk/healthcare

SPECTRANETICS



SPNC develops, manufactures, markets and distributes single-use medical devices used in minimally invasive procedures within the cardiovascular system. The Company's products are sold in over 65 countries and are used to treat arterial blockages in the heart and legs and in the removal of pacemaker and defibrillator leads.

Spectranectis' Vascular Intervention products include Stellarex drug-coated balloon and AngioSculpt® scoring balloon as well as a range of laser catheters for ablation of blockages in arteries above and below the knee. The Company also markets support catheters to facilitate crossing of peripheral and coronary arterial blockages, and retrograde access and guidewire retrieval devices.

The Lead Management (LM) product line includes excimer laser sheaths, dilator sheaths, mechanical sheaths and accessories for the removal of pacemaker and defibrillator cardiac leads.

EXHIBITION PROFILES - GENERAL

ST JUDE MEDICAL



St Jude Medical is a global medical technology leader focused on six key treatment areas including heart failure, arrhythmias, vascular disease, structural heart, chronic pain and neurological diseases. Within vascular disease, our breakthrough solutions guide healthcare providers in their treatment decisions helping improve patient outcomes and providing cost saving opportunities. We are uniquely positioned to achieve our goals by providing innovative solutions that reduce the economic burden of costly diseases on the health care system. Our Vascular portfolio includes guidewires, Hemostasis Management, Intravascular diagnostics and imaging, peripheral vascular embolization, Renal Denervation, Bipolar Pacing catheters and Vascular access.

TOSHIBA MEDICAL SYSTEMS

For radiology professionals seeking clinical excellence and operational efficiency, we offer an unbeatable combination of high quality MR, CT, XR and ultrasound scanners with the UK's most responsive and reliable support. This enables our customers not only to achieve the highest levels of image quality consistently, but also to maximise patient throughput, and therefore efficiency and productivity.



VASCULAR PERSPECTIVES

Vascular Perspectives Ltd. is a medical device sales organisation based in the UK. We offer a unique and innovative product portfolio for use in interventional radiology. We engage with device users in an educational and informative way, supporting clinical teams throughout the United Kingdom to achieve maximum procedural success. We work with key opinion leaders to communicate new ideas and techniques through highly informative educational resources and programmes designed to support both product and procedure.



We look forward to demonstrating our product portfolio to you on stand 5/6

PHILIPS VOLCANO

Philips Volcano, a Philips business, is a global leader in physiology and intravascular imaging for coronary and peripheral applications. The business also offers a suite of peripheral therapeutic devices. This is part of Philips' industry leading solutions to decide, guide and confirm the right therapy for each patient in real-time during image-guided therapies. Founded in cardiovascular care and expanding into other specialties, Philips is focused on improving patient and economic outcomes.



VYGON

We are a leading supplier of medical and surgical devices with a reputation for delivering high quality products and excellence in customer service, helping healthcare professionals offer best practice solutions to their patients.



Our Products: Our product ranges extend across many therapeutic specialties, including vascular access, regional anaesthesia, IV management, neonatology and enteral feeding.

Our Services: In addition to a wide product offering, we are also fully committed to education and training, providing complementary training and technical support to customers to promote best practice in-line with current clinical guidelines.

Our Customers: We supply our products and services to healthcare professionals in the NHS and private sector throughout the UK - from PCTs and NHS Trusts to District and Community Hospitals, as well as GP Practices and Walk-In Centres.

EXHIBITION PROFILES - GENERAL

WL GORE

W. L. Gore & Associates (UK) Ltd
Kirkton South Road, Kirkton Campus, Livingston EH54 7BT
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F: +44 (0)1506 678199
E: medical_uk@wlgore.com
www.goremedical.com/eu



At Gore Medical, we have provided creative therapeutic solutions to complex medical problems for 40 years. During that time, 40 million innovative Gore Medical Devices have been implanted, saving and improving the quality of lives worldwide. Our extensive family of products includes vascular grafts, endovascular and interventional devices, surgical meshes for hernia and soft tissue reconstruction, staple line reinforcement materials, and sutures for use in vascular, cardiac, and general surgery. We are one of a select few companies to appear on all of the U.S. "100 Best Companies to Work For" lists since the rankings debuted in 1984. For several years now, we have also been voted one of the best workplaces in Europe and have been ranked on top workplace lists in France, Germany, Great Britain, Italy and Sweden. For more information, visit goremedical.com/eu.



Provision of interventional radiology services

The Royal College of Radiologists in collaboration with the British Society of Interventional Radiology

Document available at bsir.org



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The Royal College of Radiologists



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OUR STAND IN
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Surname: _____

Forename: _____

Contact Address: _____

Postcode: _____

Telephone: _____

Email: _____

Hospital Name: _____

YOU CAN NOW JOIN ONLINE AT [BSIR.ORG](https://bsir.org)

BSIR AGM

NOTICE OF BSIR ANNUAL GENERAL MEETING, 2016

AGM AGENDA:

1. Apologies for absence
2. Minutes of previous Annual General Meeting (held in Glasgow, 2015).
3. Matters arising

Standing Items:

4. Presidents Report on the Society's Activity since previous AGM
5. Secretary's Report on Society's Activity since previous AGM
6. Treasurer's Report on Society's Activity since previous AGM and BSIR Accounts for Financial Year 2015-16.
7. Discussion items:
 - a. Vascular Society Training Curriculum
 - b. NVR
 - c. BSIR invited speakers/moderators delegate fees.

If you have any questions or issues to raise please contact Julie Ellison on council@bsir.org or go to BSIR Registration Desk in Exchange Foyer.

New EUCOMED/MedTech Europe rules regarding educational meeting attendance



The new guidance, which is in transition from 1 January 2017 and must be in place for members of EUCOMED/MedTech Europe and ABHI by the end of 2017, could make it more difficult to attend educational meetings if you rely on industry support.

Companies may be able to indirectly sponsor individuals by providing educational grants through organisations like your trust, so you should consider setting up arrangements for management of such grants with your trust's finance department.

If you are invited to attend a specific training event for an IR technique or device the host company may still be able to invite you and pay for you to attend.

If a company asks you to present at a meeting you could be supported with an honorarium and payment to attend the meeting, subject to your individual trusts' declaration of gifts and honorarium rules.

The new rules will come into force throughout 2017, therefore it is very important you are clear on these and begin to plan your meeting attendance as soon as possible.

For a full breakdown of the changes, please see below.

Steve Thomas,

Chair BSIR M&R committee, on behalf of the BSIR

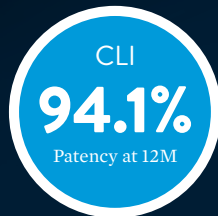
How the changes might affect you

DURING 2016	AS OF 1 JANUARY 2017	AS OF 1 JANUARY 2018
<p>Direct sponsorship</p> <p>Companies choose individual HCPs and financially support their participation to third party organised events. Such support usually covers some or all of the travel, lodging and registration costs.</p> 	<p>Direct sponsorship</p> <p>Allowed</p> 	<p>Direct sponsorship</p> <p>Not allowed</p> 
<p>Educational grants</p> <p>Companies give educational grants to hospitals, medical societies and other third parties. These include grants to support HCPs participation to third-party organised events.</p> 	<p>Educational grants</p> <p>The recipient of the grant chooses which HCPs to support</p> <p>More stringent rules</p> 	<p>Educational grants</p> <p>The recipient of the grant chooses which HCPs to support</p> <p>More stringent rules</p> 

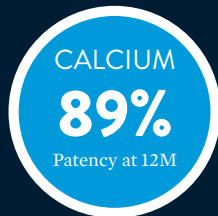
CONQUER THE COMPLEX.



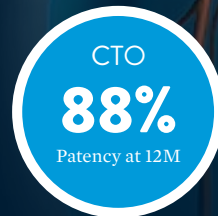
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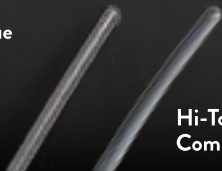
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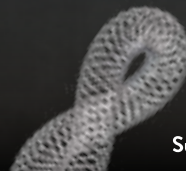
Hi-Torque
Command

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Armada 18



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TREAT

StarClose SE



Perclose
ProGlide

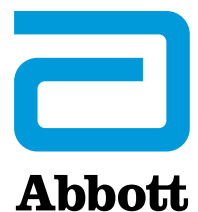
CLOSE

1. Palena, L.M., SUPERSUB Trial: 1-yr outcomes of SUPERA Subintimal stenting in CLI Patients, LINC 2016. 100% CLI patients, 100% diabetics, 100% TASC C/D, mean lesion length 27.9cm.
2. Garcia, L., The SUPERB Trial 3-year Results, VIVA 2014.
3. Katsanos, K., SUPERFAST Trial: 1-year results, SUPERA stent vs nitinol stents (propensity matched analysis) for CTOs of the femoropopliteal artery, CIRSE 2016.

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VASCULAR



BSIR COMMITTEE REPORTS

PRESIDENT'S REPORT

This has been a very eventful year for interventional radiology and the BSIR. The BSIR council officers and committees have been very active in supporting the societies objectives and I will highlight the main areas in my report. The full details of the committee's activities can be seen on the reports from the individual committee's on the subsequent pages. I am of course always happy to discuss BSIR issues at any time by email but I would encourage members to raise or discuss any of these matters to me personally during the ASM or at our Annual General Meeting in November.



I want to first pay tribute to Wattie Fletcher who died in September this year. He was a pioneer in the field of UK interventional radiology, one of the great founding fathers of Interventional radiology practice in the UK and instrumental in the setting up of the BSIR. I was fortunate to have met him on several occasions when he sometimes came into the radiology department in Oxford and of course at the ASM. On top of his excellent skills as an interventional radiologist, a great tactician and politician in setting up the BSIR, he was also a very kind and generous man. We quite rightly honour him at our ASM and will make the Wattie Fletcher lecture particularly poignant this year.



You will be aware that there has been a major issue relating to the interaction between IR and Vascular Surgery in London, particularly focussed around St Georges Hospital, which has occupied much of our time over the last year and the ripples have impacted on interventional radiologists throughout the UK. I will not dwell on the details but it highlights the importance of maintaining good working relationships and mutual respect between colleagues. We need to be working closely and collaboratively with our VS colleagues for many years and we have been working hard with the RCR and VS to ensure that there are good training opportunities for IR's nationally, and that lessons are learned so that similar problems do not arise in other centres.

BSIR Communications: Interventional Radiology faces huge challenges over the coming years not least producing enough well trained IR's, with the appropriate infrastructure to deliver a high quality 24/7 service. Investment in IR needs to be scaled up significantly which in the current financial climate is a huge challenge but also a real opportunity when the health service is looking at new ways of working. The communications committee with Brian Steadman as chair is leading a BSIR initiative improving the profile and visibility of Interventional radiology. The BSIR is investing in a PR company to help us get our message of improved patient care and outcomes by investing in IR nationally. This is both a medium and long term project and we will be asking members for suggestions on good news stories and case histories to help get our message across.

BSIR Elections: The BSIR committee's are vital to the running of the society. We rely very heavily on the good will and support of members who work in the important roles in these BSIR subcommittee's. We are delighted that once again we had an excellent field of candidates to choose from and the 2016 elections for the subcommittees were again successfully administered via our website. We successfully appointed to all the senior posts and I want to congratulate all those who were appointed and wish them every success in their new posts. I also want to thank the unsuccessful candidates for making the effort in standing for these committee's and perhaps consider standing again future elections (the downside to elections is that there are often more excellent candidates than posts, and it is discouraging not to be elected). It is vital we have motivated members from a range of backgrounds in IR to ensure we have the right mix of committee members to represent UK interventional radiology and work on behalf of and for the good of interventional radiology. I would urge all members to consider putting themselves forward for these roles at next years elections to help shape the future of UK interventional radiology practice and of our society.

Education and Research: Education and Research is a major focus for the BSIR and forms one of the cornerstones of the objectives for the society. IR's need to continue to increase the evidence base for IR procedures and demonstrate the benefits of our techniques in improving outcomes, and patient care. I am again delighted to announce that the society has made several grant awards to worthy research projects to support research and innovation in IR. I would encourage members to consider areas for future research particularly in areas of their practice and put a grant proposal for next years round.

The BSIR continues to invest in training. The basic and advanced courses with their focus on both clinical and technical skills within small groups teaching from experts in the field are a fantastic opportunity for trainee's and young consultants to learn and improve their knowledge and skills. The annual scientific meeting is one of the major focusses of the society calendar and an opportunity for shared learning of both established and new techniques. It is also a real opportunity for networking, discussion and debate. I want to congratulate Mo Hamady and the SPC committee in producing a world class program, which is probably one of the most ambitious in its wide ranging content, and tackling difficult issues in our key debate on the future of IR. This year we have a very important debate in the program on the future strategy for IR in the UK. This will be led by myself and Trevor Cleveland with key lectures from our RCR president Nicola Strickland and one of our most distinguished interventionist Professor Tony Nicholson. This is a must for all, young and old within the society to help guide the future direction of UK IR.

BSIR COMMITTEE REPORTS

Our future success lies in the hands of the next generation and again the society is encouraging the attendance of medical students, junior doctors as well continuing the training themes for our registrars. Please encourage all your trainee's to think of IR as a future career and if possible attend the BSIR congress where BSIRT led by Dr Sam Boyt and Dr B Hussain have created an interesting and innovative program directed specifically for them. As you will be aware the Royal College of Radiologists and the BSIR created a jointly funded visiting professorship . "The Graham Plant Visiting Professor in Interventional Radiology", which was advertised earlier this year. We had an excellent field of applicants and following a competitive selection we appointed Professor Duncan Ettles as the first visiting Graham Plant Professor. The purpose of the post is to support education and training in interventional radiology and will allow the visiting professor to deliver a series of lectures and small group teaching sessions on IR topics to radiology training schemes across the UK.

Interventional Oncology UK: Interventional oncology is becoming an ever increasing component of interventional radiology practice. There is rapid evolution of technologies and techniques in this area and should be shared across the UK. I am delighted to report there was again a highly successful IOUK meeting this year following on from the success of the first meeting last year. I would like to congratulate Dr Tze Wah and organising committee and planning for next years meeting is already under way.

National Consultations and liaison with other societies: Our biggest challenge remains training sufficient numbers of clinically focussed IR's to cover the range of service we now provide, including the on call. We have regular liaison meeting within the college and we are working hard to improve our training, and support expansion of IR in the UK. The BSIR with the college are leading the drive to ensure that IR procedures are appropriately funded through national Tariffs. This is vital to ensure our visibility as generators of income within the NHS organisation and an area worth investing in for trusts. We am grateful to officers and members who regularly feedback on these consultations and support our response to monitor. It is clear however that the Tariffs poorly reflect the true cost of procedures and therefor the inherent risks of underfunding. The BSIR has led a major costing exercise led by Professor Ettles to ensure we have the true costs of our procedure on which Monitor bases its costs.

Stroke Strategy. Last year we were contacted to look at how BSIR might support the introduction of 24/7 stroke provision within the UK. I have been in meetings with the SNR and college and the stroke association as to how this might be achieved. Some members may already have the knowledge and many of the skills to help support this service. However it is going to be challenging to provide a seamless service across the UK . There is unlikely to be a single solution for all centres. Discussions are ongoing but the training requirements will be significant and different centres will need to work collaboratively within their centres to see how these might be provided.

In line with the duty of candour statement for diagnostic imaging the BSIR in collaboration with the RCR have produced a IR version to clarify and provide guidance to members for when things go wrong. This will be available on the BSIR and RCR websites.

We and other interventional radiologists have been representing the BSIR in the All Parliamentary Groups in PAD, Medical Technologies and Women's Issues. The PAD group has produced its third report on recommendations to improving patient care with PAD and highlights the need for good pathways, MDT's and access to new technologies in optimising outcomes and improving limb salvage.

Eucomed: Our relationships with industry is important in a number of areas, most notably in the development of techniques and technologies that have massively improved patient care and quality. There are new rule changes, which were announced last year, and these are already coming into effect, and will progress over 2017. The details were highlighted last year to members and posted on our website. This in practical terms will prevent direct sponsorship of doctors to attend third party meetings (i.e. meetings such as the BSIR ASM, but not meetings directly organised by the company for training), and also the way that the BSIR received support. It is still not clear how companies and organisations will deal with this in detail, and we are working closely with ABHI to clarify the proposals . Declan Dunphy who chairs the ABHI will be speaking at the ASM to expand on the rules and possible solutions. There will also be handouts and further details on our website. Please take time to consider how this will affect you, and make suitable plans. BSIR will continue to keep you informed of developments as they occur, to help guide you.

Finally I hope you all enjoy the ASM in Manchester. Both the scientific and social program I know will be excellent and I hope to meet you all in person for a coffee and or glass of wine.

Raman Uberoi, BSIR President
Trevor Cleveland, BSIR Vice-President

BSIR COMMITTEE REPORTS

TREASURER'S REPORT

The BSIR finances remain stable. Last year's BSIR Annual Scientific Meeting in Glasgow was well supported by Registrants and Industry – at the time of writing I am awaiting the final figures but understand that the meeting returned a satisfactory profit, for which I thank Ruth Moss, our Conference Organiser, and the Scientific Programme Committee. The Society has continued to invest in supporting our activities in teaching, in research grants and bursaries and in promoting IR to junior doctors and medical students.



The Society's reserves are healthy, but this is a challenging time for investors. In February 2014 we invested £200,000 in Schroder's Charity Multi-Asset Fund. This fund aims to return capital growth at the rate of inflation plus 4% over the long term, but in line with generally poor performance in equities in the last six months our initial capital gains remain minimal. We have £400,000 in the bank deposit account currently earning 1% on instant access. We have continued to see a gentle draw down on the Society's reserves, which I believe is appropriate, in order to support our charitable objectives.

An important decision this year has been to employ the Tonic PR Company to help us promote Interventional Radiology. Although expensive, this should help raise the profile of our specialty with clinicians and the public, and hopefully result in increased numbers of trainees and funding for our endeavours in the medium to long term.

We have now switched over to payment of members annual subscription by Direct Debit. I would like to thank Julie Ellison for her hard work in managing the change-over which went remarkably smoothly. The Admin Team and I are very grateful for members' cooperation with setting up the Direct Debit Mandates

Fiona Miller
BSIR Treasurer

REGISTRIES & AUDIT COMMITTEE REPORT

Committee Members: TC See, Christopher Hammond, Said Habib, Fiona Miller, Tarik Ali, Charles Trapping & Usman Raja
2016 Web-conferences: 22/03/2016, 28/06/2016 & 27/09/2016

There have been some significant developments in the registries and audit projects at BSIR over the past two years, most notably the closure of BIAS. The changes are necessary to reflect the current state of clinical practice and to standardise data collection across the field, which increasingly also involve other clinical specialties. The role of the Registries and Audit Committee is to ensure a robust process is available to capture those data and the outcomes are shared for best practice. The committee welcome any suggestions to improve the process and any new topics or practice for a national audit or registry. Below is an update of the current status of BSIR registries.

BIAS and NVR

- BIAS registry was closed in March 2016 following approval from Council.
- BIAS report was first published in 2008 when there were 4,297 entries.
- There are now a total of 13,877 procedures registered in BIAS since 2005. A preliminary data analysis has just been completed with the support from Dendrite. Final analysis will be conducted and shared with all BSIR members.
- Members are encouraged to submit data to NVR, which is the only nationwide registry available for peripheral vascular and aortic interventions.
- BSIR is working closely with NVR to optimise the process of submission.
- <http://www.bsir.org/registries/national-vascular-registry-nvr/>

SIRT

- Data submission is now fully anonymised since 1st March 2016.
- The NHS number is replaced with a unique randomly generated patient identifier (PID); date of birth with age in months; UK postcode truncated to the first 4 characters
- It is mandatory for all 10 centres selected by NHS England to deliver SIRT service as part of a time-limited programme through 'Commissioning through Evaluation' to enter all data pertaining to this programme to the registry.
- Members are also encouraged to enter data on cases where funding was obtained out of the NHS England programme
- <http://www.bsir.org/registries/sirt-registry/>

BSIR COMMITTEE REPORTS

Biliary

- First biliary report published by BSIR covered data from Nov 2006 to Aug 2009 with 833 cases submitted by 62 operators from 44 centres
- The number registered to date is 2,133, which is 1,300 in addition since 2009. The Registry uptake is poor in the last 2 years with 63 cases registered on 2014 and 16 on 2015
- Currently this is the only non-vascular index registry held at BSIR and this should be revived.
- Members are strongly encouraged to provide data entry retrospectively and prospectively.
- <http://host.e-dendrite.com/csp/bstent/FrontPages/bdsrfront.csp>
- An up to date preliminary data analysis will be performed.

UK-ROPE (Registry of Prostate Embolisation)

- The aim of the registry was to support the introduction of prostate artery embolisation in UK in order to provide data to NICE
- Recruitment was successful and closed at the end of Jan 2016 with 208 PAE and 80 TURP patients from 18 centres. As the number required for data analysis was achieved the registry is now closed for new data submission.
- 12 month follow up results will be collated by first quarter 2017. NICE is expected to issue a new report later in 2017.

New Registries Approved by BSIR

- Arterio-Venous Malformation (AVM): initial planning stage.
- A snapshot online survey on 'Out of Hours Interventions for Haemorrhage' was conducted on the first week of October 2016. Results to be presented at BSIR 2016.

Interventional Radiology Standards

- The committee is working on a short nephrostomy benchmarking document with the aim of providing reference and evidence to members to facilitate consent taking process and to provide a guide on safe practice.
- Collaboration with RCR Audit Committee is being explored for shared learning, audit tools and resources.

TC See

Chair, Registries & Audit Committee

BSIRT REPORT

Summary of Activities:

1. Medical Student/Foundation doctor essay prize 2016
We had an excellent response and received 84 entries for the essay scholarship. The standard was generally high with some demonstrating really interesting insights into the perception of IR amongst students. 63 received the scholarship.
2. Trainees day
All is in place for what should be an excellent Trainees day, with a series of excellent lectures followed by workshops
3. Student activities at BSIR 2016
 - Student talks in a small room on day 1 am (speakers and room TBC)
 - Meet and greet with BSIRT committee @ BSIRT stand day @ 1st coffee break
 - Social event: @BSIR drinks reception
 - Timetable of useful/ relevant sessions
4. CIRSE ETF (European Trainees Forum)
CIRSE ETF have had 2 meetings and debuted several trainee specific events at CIRSE 2016. This group has been a huge success, and is a priority of the CIRSE president. CIRSE are looking to expand on the trainees activities in 2017.
5. IR logbook
Rhys (M & R rep) is working alongside RCR to develop an efficient IR logbook app that allows useful data extraction.

Sam Byott

BSIRT Chair

BSIR COMMITTEE REPORTS

COMMUNICATIONS COMMITTEE REPORT

Communicating the essential role interventional radiology plays in keeping patients safe is at the heart of our communication strategy. Interventional radiologists are pioneers and as a group have been hugely successful in improving patient care over the last decade. Interventional radiology impacts on all aspects of modern medicine and yet the subspecialty is barely visible with limited recognition from commissioners, colleagues and the general public. This has left us exposed to threats from several areas including; poor recruitment, fragmented commissioning and predatory medical and surgical subspecialties.

To help redress the balance the committee has worked hard over the last 12 months to develop a coherent long term plan to improve the profile of Interventional radiology.

At the heart of this plan is the engagement of a professional public relations organisation with a proven track record in the medical technology field. To ensure BSIR gains the most benefit from the relationship the committee spent a day drawing up a "Interventional Radiology – 2020" strategy document and then went out to commercial tender with 5 competitive PR agencies with formal "pitches" at the RCR in September. Tonic life led by Louise Fish (formerly NICE communications director) were unanimously chosen to work with BSIR for the next 3 years. They are already working alongside the scientific program committee to identify areas of the AGM which may be of media interest and will be present at the AGM with a stand near the registration desk to help identify regional members with a willingness to engage with the press and develop local news items.

The committee feel the "pinhole surgeon" title previously used by BSIR should be updated and have advocated the use of "Image guided surgery". This has the major advantage of focusing on our extensive training in image guidance and will help with public engagement.

There has been a rapid expansion in the social media footprint of the society; the facebook page had 400 likes last week alone. A dynamic video created by Phil Haslam giving an insight into the scope and role of interventional radiology has received 57,000 views in 3 weeks (yes 57K)!! – available through facebook or BSIR homepage and along with the "without a scalpel" video on vimeo are starting to get trainees and the press talking about IR.

Our website review is ongoing, the 2015 scientific videos are online and should be searchable and we are focused on making the website a major portal for the general public and the press when researching medical conditions and potential treatment options. The site will be easier to navigate, and we hope to incorporate a member's only forum with the ability to rapidly communicate the work of the society to its members.

2017 will be an exciting year for the society. The committee feel with these developments the society will be in a far stronger position to articulate the pivotal role interventional radiology plays in modern healthcare over the next 12 months.

Brian Stedman (Chair)

Phil Haslam

Hilary White

Doug Turner

EDUCATION COMMITTEE REPORT

Since the Spring Council meeting the Education Committee have been co-ordinating the annual Bursary and Terumo Scholarship applications, liaising with the RCR and VS over a number of IR training issues, compiling SBAs for the FRCR2A exam and discussing with Council the future of plans for a BSIR funded Research bursary.

Advanced Practice Course:

Barts/London ran a successful APC in June. Dundee will run the 2017 course. We look forward to working closely with the local organising committee. Bids will be invited for the 2018/2019 courses in early 2017

Terumo Scholarship:

Terumo have kindly agreed to sponsor their 'case study' scholarship for another year. The submissions closed on 21st October and the Education committee will score the applications with the 2 winning case studies announced at the BSIR meeting in Manchester.

BSIR COMMITTEE REPORTS

BSIR Bursaries:

The BSIR bursary applications closed on 20th October. These will be scored by the education committee with recommendations made to council before Christmas.

IR Training centres:

The Education committee have continued to explore a mechanism to maintain an up to date record of UK IR centres offering run through ST4-6 IR training or fellowships. This list will be regularly updated and accessible via the BSIR website, for the use of trainees and training program directors. This work is on-going

RCR Curriculum review:

The RCR curriculum review process agreed with us in 2016 to remove Level 2 Vascular IR curriculum competencies from the vascular section of the Diagnostic Radiology curriculum. Level 1 competencies in both curricula were adjusted to allow for this. Trainees not on run through IR training can still be trained to provide vascular IR to a level appropriate for DGH departments, both with and without IR on call rotas, in the context of variable network arrangements for more complex vascular IR.

The committee will be asked to review the RCR specialist IR curriculum again this autumn

BSIR support for research/academic trainees:

The committee and council have been considering various ideas for supporting IR research and education, in addition to the existing scholarships and bursaries. Trainee requirements and expectations reflect a job market that favours the applicant, so few trainees currently choose an academic pathway. This will be discussed further over the winter months.

RCR meeting workshop:

The BSIR hosted an interactive workshop at the RCR annual meeting entitled:

“Out of Hours IR: what the diagnostic Radiologist needs to know”

The format this year allowed delegates to view cases loaded into Osirix, making each presentation flexible, interactive and more attractive. The session was well attended by mainly diagnostic consultants. The Education committee will be organising another workshop next year at the ASM in Liverpool. We are exploring offering a more hands on workshop, possibly targeted at trainees, particularly those not yet decided on a subspecialty, to tempt them into IR.

I will be handing on the Chairmanship of the Education committee to Paul Scott after the BSIR meeting. I would like to thank Malcolm Johnston, my predecessor, for all his help this year, and particular thanks must go to Ruth Moss and Julie Ellison in the BSIR office for their administrative help and guidance.

Julian Atchley

Chair Education Committee

MEMBERSHIP & RULES COMMITTEE REPORT

Members: Steve Thomas (Chair), Reddi Yadavali, Dinuke Warakaulle, Rhys Llewelyn (BSIRT member), Liz O'Grady (Previous Chair), Ian McCafferty & Jai Patel (Co-opted)

Since our last report to BSIR Council the committee has been working on the following topics:-

Annual Scientific Meeting (ASM): Case studies for Trainees:

As in previous years this was overseen by the M&R committee. Topic was: 'The interventional radiology case I have learnt the most from, and why'. There were slightly fewer submissions this year, 15 v's 22 in 2015. The top 2 based on the judges ranking of the cases will be published in the BSIR ASM delegate handbook. Prize as previous will be registration fees to attend BSIR annual meeting- All but one of the submissions was eligible for a prize.

EUCOMED/ Medtech Europe guidance regarding educational meeting attendance:

The committee and the BSIR president have had discussions with industry representatives around the forthcoming new rules relating to interactions between healthcare professionals and industry. A briefing document was circulated to members at the end of last year. A flyer has been produced in co-operation with representatives of the ABHI and Medtech Europe. This will be used at the BSIR ASM, is on the BSIR website as is some brief guidance that was planned following the meeting in April 2016. The message is hopefully now being clearly given that it will not be possible to have individual sponsorship to attend educational meetings, breaking the link between sponsorship and medical technology companies, with a need to set up a process to be able to accept educational grants to be administered by an independent 3rd party



BSIR COMMITTEE REPORTS

within individual trusts. As set out previously and explained in the flyer: Timelines are: Introduction from 1st Jan 2016 with a transition period to 31st Dec 2017, so from Jan 1st 2018 there will be no financial support to sponsor individual Health care practitioners (HCP) for, for example, attendance at scientific meetings. The request from ABPI (Association of British Healthcare Industries) to present at the Annual meeting has been accommodated with some time found on Wednesday at BSIR.

SIRNR:
The committee has continued to work with our Interventional Nurses and Radiographers to help them develop as a professional group under the auspices of BSIR. Unfortunately there have been no real developments in terms of new members willing to move the society forward, by sitting on their committee structure to help run the society. As a result the program at the ASM in November is currently going to be used as a forum to discuss the future direction of SIRNR and if it is able to survive in its current form. SIRNR has to be able to act as a stand-alone Special Interest Group supported by BSIR, and BSIR have given them a platform with information on the BSIR Website and access to a session at the annual meeting.

Unless the SIRNR can self-sustain then the society will not be able to continue. That may be the outcome of the discussion at the BSIR scientific meeting.

Other Specialist interest groups:
Contact has been made with Interventional Oncology UK group, who will be a specialist interest group (SIG) with links within BSIR. Tze Wah attended last webconference of the M&R committee, to give an update on Interventional Oncology UK activities. Activities from this year are available on the BSIR website.

BSIRT committee members:
Fatemeh Sakhinia will be continuing as the Chair of this group even though she has moved to a consultant post. This will allow continuity and leadership from an experienced individual to represent the issues relevant to IR trainees.

Duty of Candour: BSIR statement on Duty of Candour:
The last version that was approved by Council has been sent to RCR and pending a minor amendment has been endorsed by the RCR, this will appear on the BSIR website.

Free year membership for attendees at BSIR introductory courses:
The committee has now had agreement from Council to offer 1 year free membership to junior doctors (at pre SpR level) who attend one of the BSIR badged introductory courses. The aim is to attract junior doctors who are showing an interest in Interventional Radiology at an early stage.

Standards in Vascular Radiology –Revision:
This document is being updated this year. Reddi Yadavali and Jai Patel are leading on this. Information from the latest data review of the BIAS database will feed into this. A first draft revision should be available for the Council meeting in November.

Steve Thomas (Chair)
On behalf of Membership and Rules Committee

SAFETY & QUALITY GROUP REPORT

This is the newest BSIR committee. Sam Chakraverty was elected as chair for 2 years, but following his appointment as RCR patient safety advisor he stepped down from May 2016, and Graham Robinson will chair the committee until November 2017.

The latest round of exemplar and pilot sites has been agreed, with a 5 year cycle for renewal. The QI website is to be linked to BSIR and RCR websites with a plan to use the site to host IR patient safety material so that government agencies can link in.

Teik Choon See has written an article for READ on injectables, and the committee will be issuing further guidance to members on the recently issued NHS improvement notice regarding the use of closed systems. Members should be aware that whilst this is a topic on which BSIR has been consulted, we have had no ability to influence the mandated recommendation beyond excluding closed systems for embolics.

Matthew Gibson has chaired a group that has produced a very comprehensive review of sedation and analgesia, which will be released shortly.



BSIR COMMITTEE REPORTS

MHRA have revived a project to improve incident reporting – professional users are persistently around 10% of the level reported by industry.

Muhammad Zamir has drafted an IR example on duty of candour to the RCR template.

Graham Robinson, on behalf of the committee:

Sam Chakraverty

Teik Choon See

Jon Bell

Andrew Hatrick

SCIENTIFIC PROGRAM COMMITTEE REPORT

The scientific program has been posted on the website and it is ready for another successful year. A wide range of topics will be covered in the main sessions as well as in workshops. Four renowned international experts in various aspects of IR will be participating in this year's program. Fourteen hours of the program will be secured for workshops and master classes. The hot debate about the future of IR is expected to host outstanding speakers. We hope this session will continue in the coming years to enhance the political engagement of members in steering the development of IR. A Special focused session is devoted for patient safety in IR and updates from various registries.

To raise IR profile as well as alerting public about certain crucial topics such as; diabetic foot care, advanced oncology interventions, updates from ROPE registry and aortic dissection, the SPC has been liaising with Tonic company. Media plans are being developed to ensure that the impact of the annual scientific meeting is maximised and disseminated. The chosen slogan is "innovation, education and advancing patient's care in image guided surgical intervention".

This year's abstract submission and selection has been overall successful. Using the modified electronic system, the submission is smooth and easy. Further refinement of the system is underway and specific recommendations have been made to the developing company. The total number of submissions this year is 149 which represents some reduction from last year. The acceptance rate was 88%. The SPC is concerned about this drop in submission. Plans are in place to encourage members to engage more and to appreciate the importance of scientific submissions to individuals and to speciality alike.

The BSIRT training day program has also been finalised. Topics have been chosen to offer delegates practical guidance on career development as well as skills maturation.

The SPC is grateful to all invited speakers and moderators who show excellent collaboration with no last minute changes or withdrawal.

The coincidence of the meeting dates with Veith incurred some significant logistic difficulties and I suggest to take this into consideration when organising future meetings.

Mo Hamady

Chairman of SPC

VASCULAR SOCIETY REPORT

The Vascular Society council have been working on a number of projects.

EDUCATION

1. Training – see details from liaison group with the BSIR. Curriculum changes and trainee numbers. Providing training for both VS and IR trainees
2. Run through training ST1 – 8 in Vascular surgery. Linked to the RCS improving surgical training pilot programme funded by HEE. Includes some of the Greenaway report initiatives
3. Medical manpower. Both Consultant workforce planning and middle, grade support. Non-medical physicians' associates/assistants are being increasingly considered to assist with the training vs service issue.
4. Simulation courses for VS trainees – endovascular and open (amputation, aortic, lower limb)

BSIR COMMITTEE REPORTS

AUDIT

5. Outcomes publication and the NVR. No significant outliers for surgery. Delays for AAA, carotid procedures and amputation remain too high. Working with the CQC and the NHS England quality surveillance team to develop indicators for visits and reviews in the future.

Angioplasty submission rates to the NVR remains a challenge.

OTHER ISSUES

6. Recruitment. Numbers into surgery are falling, risk of a trainee shortage increasing in all specialties. Morale low amongst trainees, need support and guidance at these difficult times. Patient safety however a priority for strike action.

7. Vascular Services. The national vascular specification is under review with the new CRG. HRG4+ is being introduced for tariffs – will influence stent reimbursement.

8. 50th Anniversary Annual Meeting, Manchester Central, 30th November to 2nd December. Preparations for a celebratory annual meeting.

Kevin Varty
Honorary Secretary

CIRSE REPORT

1. CIRSE 2016 Congress:

The 2016 CIRSE congress in Barcelona was successful with over 7000 attendees. For the second year, the IDEAS interdisciplinary aortic symposium was held and attracted specialist speakers and an increased number of attendees from all vascular specialties. The Gold medal was awarded to Professor Michael Lee and the Distinguished Fellowship was awarded to Professor Peter Gaines.

2. 2017 CIRSE meetings:

The ECIO will be held in Bilbao, Spain; GEST Europe will be held in Florence, Italy; CIRSE 2017 will be held in Copenhagen.

3. Medtech:

According to the Medtech guidelines published in December 2015, Medical Device Company members of Medtech will no longer provide direct sponsorship to doctors to attend third party educational meetings/congresses such as the BSIR and CIRSE annual congresses. The year 2017 will be a transition year when companies may choose to opt in to the new guidelines, or to carry on with their current practice and sponsor doctors to attend third party meetings. From January 2018, direct sponsorship will no longer be allowed. This will inevitably have the potential to adversely affect congress delegate registrations. CIRSE is considering its options in the light of the new guidelines to maintain attendee registrations at its meetings from 2017 onwards.

4. Curriculum:

The CIRSE European IR curriculum is being updated, with the task force chaired by Dr. Raman Uberoi. The updated Curriculum will complement the EBIR and should be published in early 2017. In addition to the basic interventional oncology (IO) curriculum that will be contained in the 2017 curriculum, CIRSE aims to publish an advanced curriculum in IO, also in 2017. This will be a stand-alone document to guide specialist training in IO – and this will be written by Professor Afshin Gangi.

5. Stroke:

The CIRSE stroke task force is continuing its work to facilitate training in intra-arterial stroke therapy for European IRs. Further information on this will be forthcoming in early 2017.

Robert Morgan
Vice President CIRSE

BSIR MEMBERSHIP FORM

PLEASE COMPLETE THE FORM IN BLOCK LETTERS

Title: Forename: Surname:

Qualifications: CCST status:

Current post held:.....

HOSPITAL

Hospital Address:

..... Postcode:

Contact Tel: Email address:.....

PREFERRED ADDRESS FOR CORRESPONDENCE (IF NOT HOSPITAL ADDRESS)

Address:

..... Postcode:

Contact Tel:

Interventional Interests:

.....

GRADE OF MEMBERSHIP APPLIED FOR (PLEASE TICK)

Full Corresponding Junior** Associate

Signature of applicant: Date: / /

All applications for membership should be supported by a member of the British Society of Interventional Radiologists. They should either sign this form below or send a separate letter of support. Once application has been received with payment it will be passed to the Membership and Rules committee for approval. On approval a receipt, letter of welcome and a user name and password will be emailed to you.

**** Junior membership is for radiologists in training. Applicants for Junior Member grade must additionally send proof of their training status in the form of a letter from the Director of their training programme.**

Proposer: Signature:

ANNUAL SUBSCRIPTION

1. Ordinary members	£180.00	3. Junior Member	£80.00
2. Corresponding/Emeritus members	£140.00	4. Associate members***	£50.00

The subscription includes BSIR membership, CIRSE membership (junior membership for junior grade members), access to BSIR web site, and CVIR.

*** Associate members DO NOT receive CIRSE membership, CVIR or voting rights within BSIR

I wish to pay by Direct Debit

Please send your subscription payment (cheques to be made payable to the BSIR), or credit details to address below:

Card Number: _ _ _ _ _

Start Date: ___ / ___ Expiry Date: ___ / ___ Security No: _ _ _ Issue No: ___ (if applicable)

Name on Card:

Signed: Date: / /

MANDATORY SECURITY REQUIREMENTS: Security No: _ _ _ Post Code (Residence card registered): ___ ___
These details will be destroyed securely once payment is processed and receipt forwarded.



BSIR | **ADVANCED PRACTICE COURSE**

7TH BSIR ADVANCED PRACTICE COURSE

14th & 15th June 2017

Cuschiere Skills Centre
Ninewells Hospital
Dundee, DD2 1UB

For all Inquiries:

British Society of Interventional Radiology (BSIR)
63 Lincoln's Inn Fields, London WC2A 3JW
Tel: +44 (0)20 7406 5998 | Email: meeting@bsir.org

www.bsir.org

BSIR/BSIRT TRAINEE DAY ESSAY SCHOLARS

ANNUAL MEETING ESSAY AWARDS 2016 FOR MEDICAL STUDENTS & FOUNDATION DOCTORS Y1-2

ESSAY TITLE:

"WHAT ARE THE PERCEPTIONS OF IR AMONGST MEDICAL STUDENTS AND FOUNDATION DOCTORS AND HOW CAN AWARENESS BE IMPROVED?"

AWARD DETAILS:

- An award (£300 plus free annual meeting registration pro rata/day) will be made towards travel and accommodation at the BSIR 2016 Manchester central 15th -17th Nov 2016. Please register each am and pm to qualify for award. Please hand in expenses claim form at Registration for reimbursement.
- A certificate of award will be given to all successful scholars .
- Photograph of the 2016 Successful scholars will take place

WEDNESDAY 16TH NOVEMBER 2016, 10.45

Please meet at registration desk

LIST OF SUCCESSFUL SCHOLARS:

Neelakshi Puspanjali Armugam
Hunain Shiwani
sarah Said Noor
Ahmad Al-rekabi
Jonathan Durbin
Chandu Wickramarachchi
Rahul Pankhania
Evangelia Spyropoulou
Jonathan Grudzinski
Salma Gabr
Vishnu Naidu
Utkarsh Ojha
Mohammed Said Noor
Patrick Whittaker
Sid Srinivas
Keerthini Muthuswamy
Georgina Moritz
Qasiim Wadood
Stephanie Vella
Marcus Belasco
Sidd Muzumdar

Wassim Merzougui
Wee Ping Ngu
Anca Smyth
Zheng Dao Yin
Bradley Storey
Samuel Booth
Edward Norman
Ben Walters
Daniel West
Nida Mushtaq
William Bolton
Gurvin Chander
Mahdi Saleh
Kenwin To
Aarushi Gangahar
Bilal Khan
Olivia Smith
Nathan Jenko
James O'Donovan
Philippa Dawson
James Coultas
Shyamal Saujani

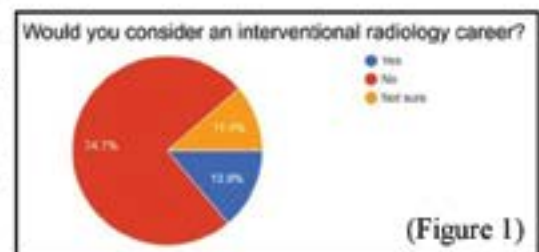
Gloria Jung
Jonathan Delf
Jennifer Elias
James Aylward
Tanya Chopra
Zaid A
Taranpal Bansal
Zuzana Holubova
Sally Zebari
Dominic McGowan
Olivia Smith
Jeremy Neale
Marawan El Farargy
Neil McIntyre
Mariyah Selmi
Sam Dluzewski
Guo Liang Yong
Adam Brown
Carys Royles
Peter Atiiga
utkarsh.ojha

What are the perceptions of IR amongst medical students and foundation doctors and how can awareness be improved?

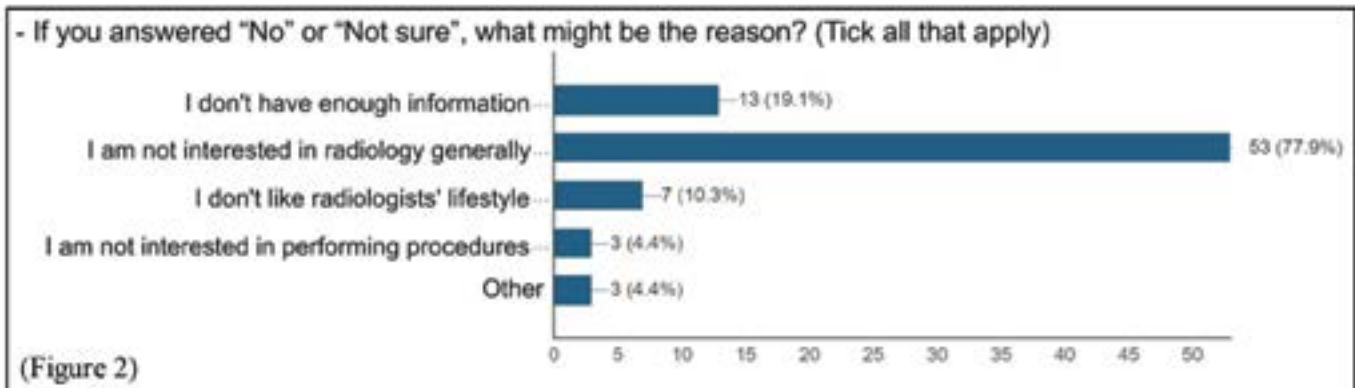
Marawan El Faragy, MB BCh. Pennine Acute Hospitals NHS Trust, Manchester, UK

Interventional radiology (IR) is a rapidly evolving field which has significantly revolutionized patient care on many emergency and elective occasions.¹ Key-hole procedures, a term used by the public as well as healthcare professionals is coined to describe those procedures performed by interventional radiologists. Such procedures are more favourable being minimally invasive and hence resulting in better outcomes in terms of patient recovery, morbidity and mortality. The Royal College of Radiologists (RCR) supports that access to IR services should be feasible around the clock. However, this puts a strain on healthcare services especially because the IR specialty is facing a significant shortage of personnel in the UK, leaving 45% of services unable to offer IR access readily in England.¹ We developed a survey to investigate the perceptions of IR amongst foundation trainees of the Pennine Acute Hospitals NHS Trust and final year medical students of the University of Manchester. The second aim was to explore the means by which awareness could be raised with the hope of attracting junior doctors to consider a career in this advancing specialty.

The study was registered at the Pennine Acute Hospital's research and development department and the anonymous survey was published online on the intranet of the University of Manchester for 882 final year medical students including those starting and those who finished their final year. The students were given a week to respond. However, the response rate was unduly poor which failed to represent accurate outcomes and therefore, results were disregarded. On the other hand, a total of 79 physical copies of the survey were handed out to available Foundation Year One and Two trainees (FYs) on two sites of the Pennine Acute Trust: North Manchester General Hospital and The Royal Oldham Hospital. The response rate for the results obtained from Foundation Year One trainees available in the wards on a single weekday and Foundation Year Two trainees during their teaching was 100%, with all participants responding. Interestingly, 45% (34/79) of FYs were introduced to IR throughout their training posts whereas 38% (29/79) were keen enough to learn more via self-directed search and reading. Around 28% (22/79) heard of IR during radiology placement of their medical school while a few trainees (6/79) heard of it in their elective placements. Surprisingly, seventy-five per cent of FYs (59/79) were not willing to consider a career in IR with 53/59 lacking general interest in radiology and 13/59 not having enough information about the specialty while around 11% were unsure about pursuing a career in IR. (Fig. 1 and 2)

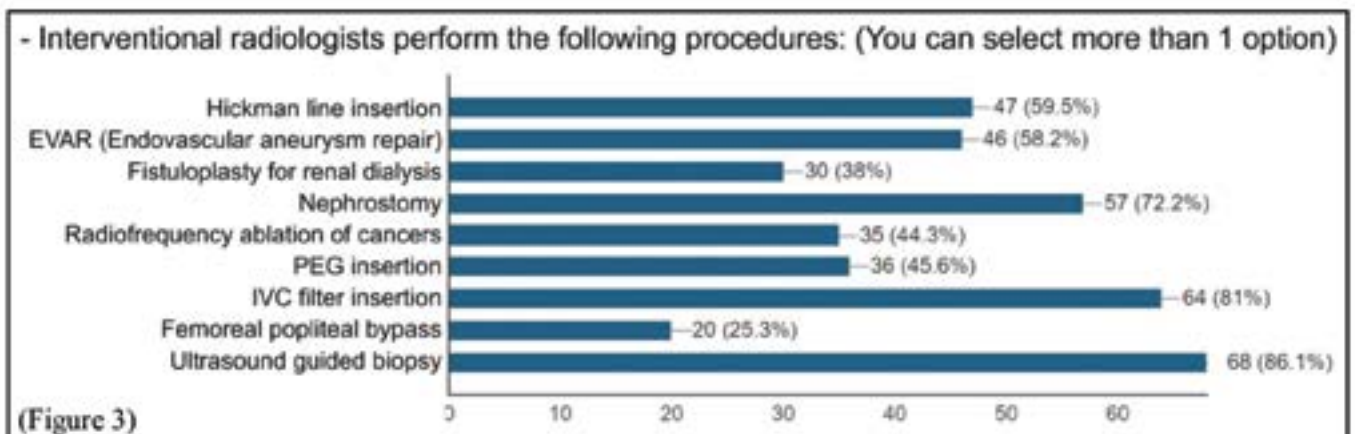


(Figure 1)



To assess the general knowledge of IR, FYs were asked a set of questions regarding interventional radiologists' career, procedures and required training. Almost all FYs were aware that interventional radiologists perform both elective and emergency procedures. The majority were also aware that interventional radiologists do on calls, however just over 55% of respondents realised that they were required to attend clinics. Less patient contact is likely to drive medical students away from selecting a career in radiology as found by a study in the USA.² It is evident how lacking adequate knowledge of IR lifestyle might dissuade junior trainees from the speciality.

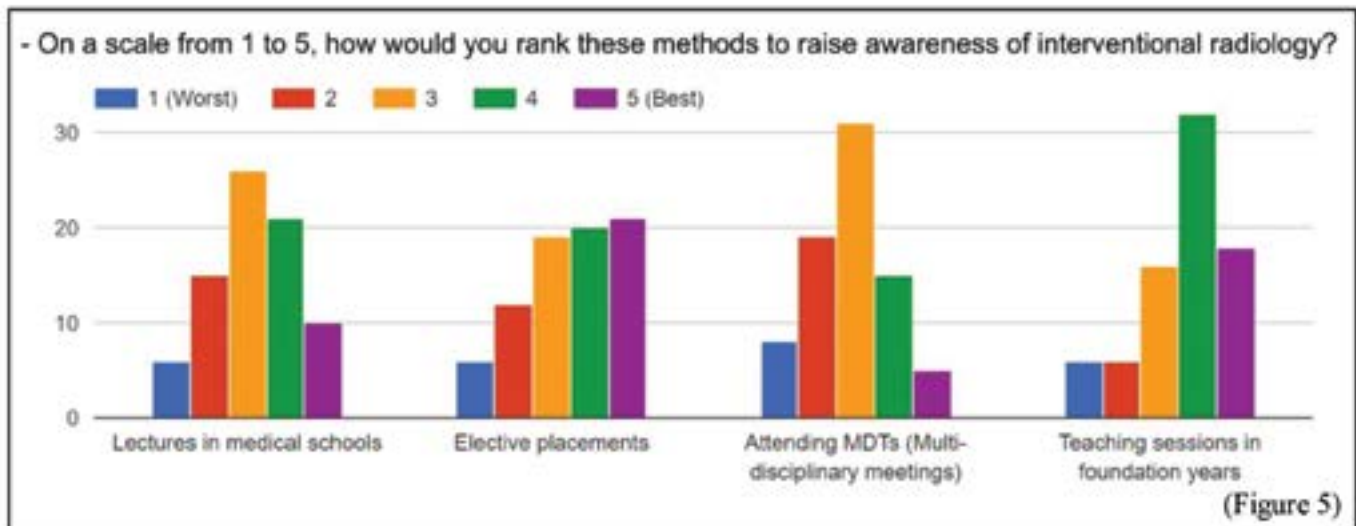
On a list of nine different procedures, just over 85% were familiar that ultrasound guided biopsy was performed by interventional radiologists closely followed by inferior vena cava (IVC) filter insertion (81% of FYs) and nephrostomy (72% of FYs). Hickman line insertion and endovascular aneurysm repair (EVAR) were selected by approximately equal number of FYs (47/79 and 46/79 respectively). Twenty-five per cent of FYs falsely thought that femoral-popliteal bypass procedure was performed by interventional radiologists. (Fig. 3) The uncertainty in selecting procedures is highly likely due to the overlap and turf battles between IR and other specialties such as vascular surgery and cardiology.³ More than 90% of FYs were aware of the three essential blood tests before proceeding with an IR procedure which are full blood count, renal profile and clotting profile (INR/APTT). Speaking of anaesthesia, around two-thirds of FYs knew that the larger part of IR procedures required local anaesthesia. Regarding the staffing levels of interventional radiologists in the UK, 58% of FYs believed that there was a significant shortage whereas 37% were unsure.



In terms of training, around one-third of FYs thought that interventional radiologists come from a surgical background through a core-surgical training prior to radiology training while 64% were aware that juniors need to apply directly for radiology should they aspire a career in IR. Interestingly, the question about the total number of training years to be an interventional radiologist posed a dilemma amongst FYs. Forty-five per cent of them believed that it takes a trainee 7 years while 25% supposed that training years are 8 and only 20% managed to identify the correct number of training years (6 years). (Fig. 4)



In the survey, we propose some suggestions on how to raise awareness of IR, and therefore, FYs were asked to rank a number of methods to help improve perceptions of IR during both undergraduate and postgraduate courses. Surprisingly, 65% (50/79) rejected the notion of learning more about IR. The most preferred methods were elective placements and teaching throughout foundation years followed by lectures in medical schools and lastly attending multi-disciplinary meetings (MDTs). (Fig. 5)



This survey is indicative of the poor general knowledge of FYs about IR. In addition, it highlights the fact that IR is not introduced appropriately to undergraduates although the Royal College of Radiologists (RCR) recommends further embedding of clinical radiology in medical education to raise awareness, develop skills of the newly qualified doctors.⁴ I strongly believe that interventional radiologists must have a leading role in teaching both undergraduates and junior doctors should we intend to address the fact that newly qualified doctors lack interest in radiology. In addition, deaneries have to ascertain that a certain level of general knowledge of radiology and IR specifically should be obtained by medical

students prior to qualification. This may be fulfilled by consolidating radiology placements through numerous means such as encouraging students to attend theatres and assist in IR procedures, providing free spots in IR conferences and embedding multi-disciplinary meetings in the daily schedule where complex and interesting cases are discussed among different specialties. A study published in the American Journal of Roentgenology concluded that integrating radiology into the curriculum of the first year of medical schools promoted the perceptions of radiology amongst students.⁵

In conclusion, IR is a demanding specialty that requires recruiting more trainees at present in order to achieve the standards outlined by the RCR and to fulfill the needs of the patients in the UK. Our survey indicates how junior trainees are less likely to select radiology when considering their future career most probably due to lack of knowledge and eyes need to be casted on how that concept can be changed sooner than later if we are to improve the perceptions of IR and attract more juniors to this evolving field.

References:

1. Provision of interventional radiology services. The Royal College of Radiologists in collaboration with the British Society of Interventional Radiology
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5. Branstetter BF 4th1, Faix LE, Humphrey AL, Schumann JB. Preclinical medical student training in radiology: the effect of early exposure. *AJR Am J Roentgenol.* 2007 Jan;188(1):W9-14

Perceptions of interventional radiology amongst Foundation Trainees of the Pennine Acute Hospitals NHS Trust and final year medical students of the University of Manchester

This survey was created in the Royal Oldham Hospital's Radiology Department and approved by the Pennine Acute Research and Development Department. The survey is anonymous. By participating, you will allow us to identify to what extent you are aware of Interventional Radiology specialty and how awareness could be improved. You will be asked a set of 15 questions. Please attempt to answer them all.

1. Have you heard of interventional radiology?
 - Yes
 - No
2. If you answered yes, how?
 - In radiology rotation in my medical school
 - Through an elective placement
 - Through self-directed search and reading
 - Other. Please specify _____
3. Would you consider an interventional radiology career?
 - Yes
 - No
 - Not sure
4. If you answered "No" or "Not sure", what might be the reason?
 - I do not have enough information
 - I am not interested in radiology generally
 - I do not like the radiologists' life style
 - I am not interested in performing procedures
 - Not sure
5. Interventional radiologists perform:
 - Elective procedures only
 - Emergency procedures only
 - Both
6. Interventional radiologists perform the following procedures: (You can select more than 1 option)
 - Hickman line insertion
 - EVAR (Endovascular Aneurysm Repair)
 - Fistuloplasty for renal dialysis
 - Nephrostomy
 - Radiofrequency ablation of cancers
 - PEG (Percutaneous Endoscopic Gastrostomy)
 - IVC filter
 - Femoral-popliteal bypass
 - Ultrasound guided biopsy
7. Interventional Radiologists do on calls?
 - Yes
 - No
8. Interventional Radiologists do clinics?
 - Yes
 - No
9. When referring a patient to have an interventional radiology procedure, the most important **two** investigations are: (Please select two options only)
 - Full Blood Count
 - Renal Profile
 - Liver Profile
 - Inflammatory markers
 - INR
10. Do you think that the majority of interventional radiology procedures require general anaesthesia?
 - Yes
 - No
11. Are you aware that there is a significant shortage of interventional radiologists in the UK?
 - Yes
 - No
12. To be an Interventional Radiologist, you need to:
 - Apply for core surgical training first
 - Apply for core medical training first
 - Directly apply for radiology
 - Not sure
13. The total number of training years to be an interventional radiologist is:
 - 5 years
 - 6 years
 - 7 years
 - 8 years
14. Are you interested in learning more about Interventional Radiology?
 - Yes
 - No
15. On a scale from 1 to 5, how would you rank these methods to raise awareness of interventional radiology?

	1 <small>Worst</small>	2	3	4	5 <small>Best</small>
Lectures in medical school					
Elective placements					
Attending MDTs (Multi-disciplinary meetings)					
Teaching sessions in foundation years					
Other (Please specify):					

Many thanks for your time and co-operation!

BSIR ABSTRACT & CASE STUDY REVIEW

ANNUAL MEETING CASE STUDY SCHOLARSHIP AWARDS 2016

CASE STUDY TITLE:

"THE INTERVENTIONAL RADIOLOGY CASE I HAVE LEARNT THE MOST FROM, AND WHY"

- Best 2 Case Studies will be published in the BSIR Delegate Handbook 2016 and BSIR website.
- A certificate of award will be given to all successful scholars
- Photograph of the 2016 Successful scholars will take place

WEDNESDAY 16TH NOVEMBER 2016, 12.45

Please meet at registration desk

AWARD DETAILS:

An award (£500 plus free annual meeting registration) will be made towards travel and accommodation at the BSIR 2016 Manchester central 15th -17th Nov 2016. Please complete claim form and hand this with receipt to registration desk for reimbursement .

LIST OF SUCCESSFUL SCHOLARS:

Sweni Shah
Juveria Siddiqui
Mark Thomas Macmillan
Maaz Ahmed Ghouri
Saurabh Singh
Thomas Gordon
Chris Williams
Umme Sara Zishan
Ali Alsafi
Juveria Siddiqui
Usman Raja
Marawan El Farargy
An Ngo
Amit Gupta

BEST CASE STUDIES

Case Study Submissions

THE INTERVENTIONAL RADIOLOGY CASE I HAVE LEARNT THE MOST FROM AND WHY?

Amit Gupta - Interventional Radiology, Guy's and St Thomas' NHS Foundation Trust, London UK

A 65 year old man presented septic with left renal colic. An unenhanced CT (CT KUB) demonstrated a left ureteric calculus with hydronephrosis and a small peri-nephric urinoma. Incidental note was made of right non-obstructing renal calculi, see figure 1.

Urology inserted a left retrograde ureteric stent, an enlarged prostate was noted but the procedure was otherwise uneventful. By day 2 the sepsis had settled. At 'board round' the patient was discharged with co-amoxiclav, culture results pending, with plans for semi-elective left calculus fragmentation.

At day 16 the patient re-presented with recurrent sepsis. CT KUB demonstrated correct stent position but a significant increase in size of the left urinoma. There was now also an obstructing right ureteric calculus with subcapsular renal collection, see figure 2.

IR inserted a right nephrostomy yielding pus, and a left retroperitoneal drain yielding pus stained urine, which combined with appropriate anti-microbials led to improvement of sepsis by day 3. However persistent high output of urine from the left retroperitoneal drain suggested ongoing urine leak. IR inserted a left nephrostomy and confirmed a large calibre leak from the renal pelvis, see figure 3.

3 days later drain output ceased and IR removed the left nephrostomy.

Total admission was 33 days requiring multiple CTs and 5 procedures (4 under IR, 3 under general anaesthetic), with development of other co-morbidities (deep vein thrombosis,

BEST CASE STUDIES

diarrhoea and retinal candidiasis).

Reflection

It was unfortunate that a right sided calculus became obstructive, but the left urinoma enlargement despite a well draining stent was unusual. The underappreciated but pivotal point was that the patient had a history of bladder outflow obstruction (BOO) and went into urinary retention immediately post retrograde stent. Despite successful trial without catheter at day 2 post discharge, there was a degree of ongoing BOO leading to reflux up the stent and continued leaking from the renal pelvis. There was a role for a short term catheter until the sepsis settled and the patient returned for definitive treatment of his obstructing calculus.

Key Learning points

IR are increasingly consulted for complex disease as illustrated by this case which combines the management of both upper and lower tract benign disease and subsequent complications. This was a challenging case with learning points for all teams involved. We welcome increasing ownership of patients and the associated admitting rights, so this case for me has served as a useful refresher of the need for meticulous clinical practice. Specific learning points include looking at the whole picture not just the presenting complaint. Thus despite pressure to rapidly discharge patients a board ward is not ideal, nor is discharging a patient who came in septic without first knowing the culture results. As such this case has further illustrated for me that a multi-disciplinary approach is vital especially in complex cases. However thanks to its minimally invasive nature and versatility, IR played a major role in the management of this case, and these qualities have firmly established IR as an indispensable specialty with clinicians and increasingly so with patients.



Figure 1 CT KUB.
Top left, coronal. 6mm obstructing proximal left ureteric calculus (arrow).
Top right, axial. Small/low attenuation left retroperitoneal urinoma (open arrow).
Bottom right, axial. Non-obstructing right lower pole renal calculus (closed arrow).

BEST CASE STUDIES



Figure 2 CT KUB
Top left, axial. Left ureteric stent (short closed arrow) and kidney anteriorly displaced by the enlarged left ureter (long open arrow). Right iliopectoral muscle layering dependently within the right subcapsular renal collection (oval marker).
Top right, coronal. Right hydronephrosis and subcapsular renal collector (open arrow).
Bottom right, axial. 4mm obstructing right ureteric calculus (closed arrow).

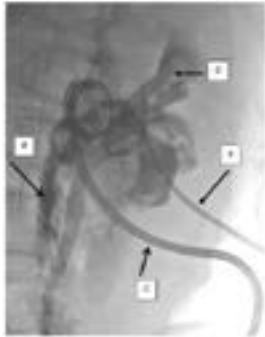


Figure 3
Ultrasound and fluoroscopic guided left retroperitoneal (arrow A) insertion, prone.

Nephrostogram confirms large calyceal fistula into retroperitoneum (arrow B).

Now previously inserted retroperitoneal drain (arrow C) and retrograde ureteric stent (arrow D).

THE INTERVENTIONAL RADIOLOGY CASE I HAVE LEARNT THE MOST FROM AND WHY?

Sweni Shah - Research and Development (Neuroradiology and Stroke), Southend University Hospital NHS Foundation Trust

Description of the case:

A 63 year old female was found in unconscious on the bath floor. On arrival to the emergency department she was not able to move her arms and legs. On examination she had quadri-paresis, bilateral upgoing plantars and a gaze palsy in keeping with 'Locked In' syndrome. She was intubated and scored 40 points on the National Institute of Health Stroke Scale (NIHSS). An urgent CT head revealed a dense basilar artery suspicious of a clot within it. Subsequent CT angiogram, demonstrated an occlusion (filling defect) of the basilar artery from the mid-section extending into both proximal P1 segments. Due to acute onset of symptoms patient underwent bridging therapy (intravenous thrombolysis and thrombectomy). Decision to arterial puncture time was 20 minutes and arterial puncture to

BEST CASE STUDIES

recanalization was 18 minutes. Complete recanalization was achieved by aspiration of the clot. Within 24 hours of procedure, she regained consciousness, NIHSS improved to 4. With rehabilitation in the stroke unit patient achieved a functional level equivalent to her pre-admission level and was discharged.

Reflection and key learning points:

This case taught me the importance of identifying and treating a neuro-interventional emergency and its impact on changing patient outcome. It also highlighted to me how vital multi-disciplinary communication and team-work is in an emergency.

Traditionally, basilar artery occlusion (BAO) has been associated with high mortality and morbidity and successful recanalization is the only key to improving prognosis. Recanalization rates for BAO with intravenous thrombolysis are as low as 4%.

However, in recent decades, BAO has evolved from uniformly fatal to a treatable disorder due to mechanical endovascular techniques (aspiration or stent retriever). A dedicated 6 French is available for performing thrombectomy of intra-cranial arteries. Current endovascular techniques recanalize 80–90% of all blocked basilar arteries. Post recanalization, even patients with severe symptoms like 'locked in' syndrome can recover completely.

A close relation exists between time, successful revascularization and outcomes in BAO. Therefore, it is vital to identify patients with BAO at the earliest. Since, hyperdense basilar artery can be present only on 1 or 2 plain CT slices the diagnosis can easily be missed. Therefore, a high index of suspicion based on clinical findings is needed.

A structured pathway and team-work can help achieve a better patient outcome by improving door to needle, decision to needle and recanalization times. All team members including paramedics, clinicians, angiography staff, radiographers, nurses, porters, and interventional radiologists can work together towards the 'time is brain' principle for

BEST CASE STUDIES

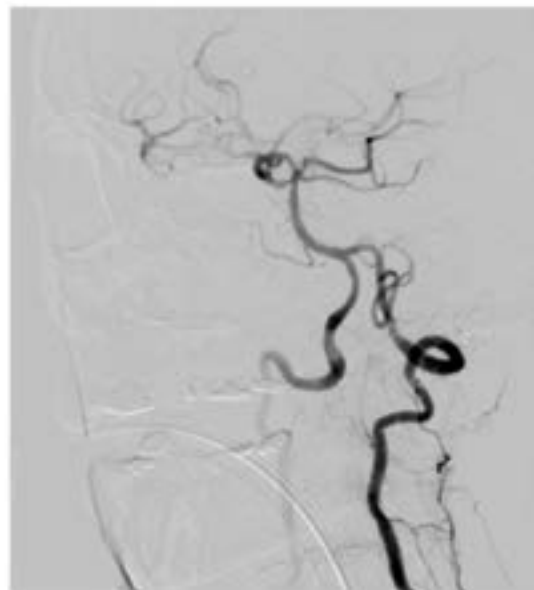
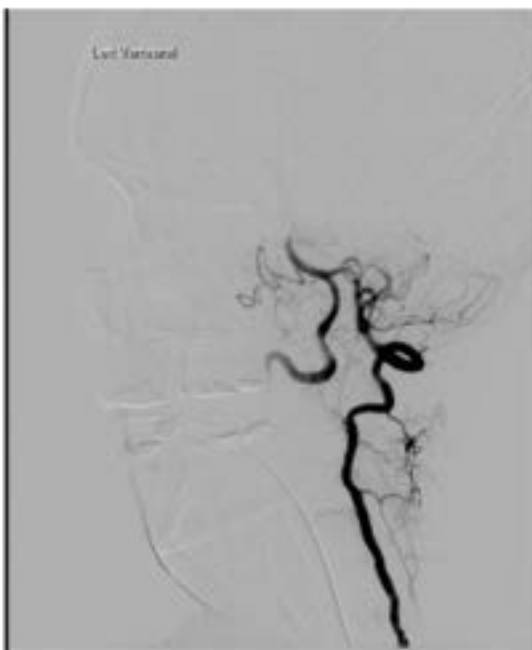
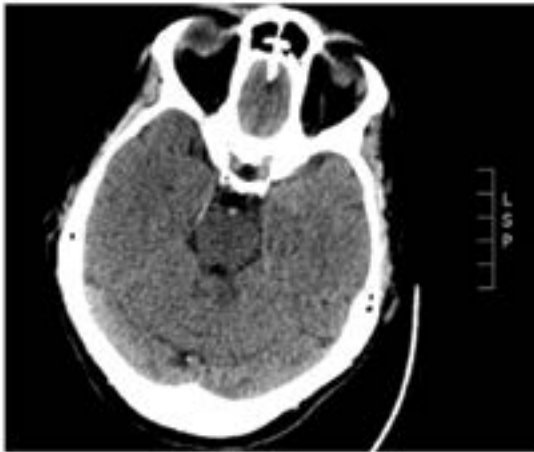
benefit of the patient.

Images attached:

Image 1: Plain CT head depicting a hyperdense basilar artery.

Image 2: Digital subtraction angiogram (pre-intervention): showing total occlusion of the basilar artery from the mid section.

Image 3: Digital subtraction angiogram (post-aspiration): showing total recanalization of the basilar artery.





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ABSTRACTS - SCIENTIFIC SESSION 1

TUESDAY 15TH NOVEMBER 2016
SCIENTIFIC SESSION 1: AORTIC INTERVENTION
MAIN AUDITORIUM: 11.15- 12.15

A SINGLE CENTRE EXPERIENCE OF CLINICAL OUTCOME IN DISTAL AORTIC STENOSIS ANGIOPLASTY

Thomas Gordon - Radiology, Royal Infirmary of Edinburgh
Andrew Walker - Radiology, Royal Infirmary of Edinburgh
Presentation Category: Aortic Intervention

Aims: To determine the clinical benefit and safety of primary angioplasty for localised infra renal distal aortic occlusive disease.

Materials and Methods: A retrospective observational study was conducted covering an 8-year period (May 2008 – May 2016) from a single centre. Fifteen patients underwent primary angioplasty of distal localised aortic stenotic disease, 12 female and 3 male with a mean age of 64 years. Clinical outcome was recorded via retrospective analysis of electronically archived correspondence from vascular and interventional radiological review clinics. These were conducted at 6-months post procedure. Further relevant clinical presentations and follow-up were also investigated and recorded on a case-by-case basis (median = 33 months).

Results: Fifteen cases of technically successful primary angioplasty to the distal aorta were performed with no post-procedure complication. 12 patients (80%) demonstrated clinical improvement and were discharged to primary care. Of these, 4 cases were re-referred to vascular services after 6-months (mean = 31 months), 2 of which for symptom recurrence. One patient received repeat angioplasty, the other received conservative treatment for recurrence of distal aortic disease. The remaining 2 cases were referred for unrelated peripheral vascular lesions. Two patients are currently awaiting review. One patient died within the 6-month follow-up period.

Conclusion: Primary angioplasty for distal aortic stenosis demonstrates good clinical outcomes for the majority of patients with a high procedural success rate and no immediate complications in our series.

EARLY EXPERIENCE WITH GORE® ILIAC BRANCH ENDOPROSTHESIS (IBE)

Asim Shah - Interventional Radiology, University Hospitals Birmingham
Shahnawaz Valliani - Interventional Radiology, University Hospitals Birmingham
Jonathan Hopkins - Interventional Radiology, University Hospitals Birmingham
Martin Duddy - Interventional Radiology, University Hospitals Birmingham
Presentation Category: Aortic Intervention

Aim: The Gore® Excluder® Iliac Branch Endoprosthesis (IBE) allows flow preserving treatment of aorto-iliac, common iliac and internal iliac artery aneurysms. The aim of the study was to report our early experience with the Gore® IBE in the treatment of these conditions as well as the novel use of the iliac branch component in the treatment of post aortic surgical complications.

Materials and Methods: Between December 2013 and December 2015, 11 Gore® IBEs were implanted in 10 patients. The majority were implanted in patients with iliac or aortoiliac aneurysmal disease. In 3 patients the iliac branch component was used innovatively as a main body device to treat infrarenal aortic pathology: in 2 patients to reline existing aortobifemoral surgical-graft pathology and in one patient to treat a late type 1B endoleak from a straight aortic endoprosthesis. Technical success, 30-day mortality and complications were investigated.

Results: Technical success and branch patency was 100%. There was no 30-day mortality. In the one bilateral IBE case an internal iliac type 1b endoleak had to be treated with a Gore® Viabahn® extension from an axillary approach.

Conclusion: Use of Gore® IBE device in the treatment of aorto-iliac aneurysmal disease is feasible and safe. The use of the iliac branch component as a main body to treat aortic pathology is also feasible and safe. Longer follow-up is needed to evaluate the durability of this endograft.

SINGLE-CENTRE EXPERIENCE WITH THE BOLTON TREOVANCE ENDOGRAFT

Arron Thind - University of Oxford, John Radcliffe Hospital
Abdel Kader Allouni - Interventional Radiology, John Radcliffe Hospital
James Sutcliffe - Interventional Radiology, John Radcliffe Hospital
Ed Sideso - Vascular Surgery, John Radcliffe Hospital
Mark Bratby - Interventional Radiology, John Radcliffe Hospital
Ashok Handa - Interventional Radiology, John Radcliffe Hospital
Raman Uberoi - Interventional Radiology, John Radcliffe Hospital
Presentation Category: Aortic Intervention

Aims: We reviewed our experience to date of using the Treovance abdominal aortic stent-graft (Bolton Medical, Barcelona, Spain) in Endovascular aortic repair (EVAR). This is a new-generation tri-modular endovascular device, developed with a lower profile to increase flexibility and an improved deployment and sealing mechanism.

Materials and Methods: Twenty-nine (27 male, 2 female) patients (mean age 79.8 yrs), who had anatomically suitable AAA (mean diameter 6.3 cm [0.8 SD]) were electively treated with a Treovance abdominal aortic stent-graft using almost exclusively percutaneous access (one case requiring unilateral cut-down). The most significant challenges were high infrarenal neck angulations (> 40° in 38% of patients) and iliac tortuosity (deemed significant in 34% of patients).

Results: The rate of technical success, defined as freedom from endoleaks, at 1 month was 83% (24/29), with 100% of patients free from type I or type III endoleaks at 1 year postprocedure. Two patients experienced aneurysm enlargement following type II endoleaks, requiring embolisation. Two patients experienced early, 30 day, graft limb occlusions, of which one was proven to be the result of graft infection. At 1 year, there were no procedural-related deaths, device-related endoleaks or major adverse events.

Conclusion: The new Treovance tri-modular abdominal stent-graft has proven to be technically successful. Short-term clinical results have been excellent, with only 7% (2/29) cases requiring re-intervention for increasing sac size. This new-generation endovascular device performed well even in angulated anatomies. We report here our local experience including 1 year follow-up data.

CEREBRAL EMBOLIC PROTECTION TO PREVENT NEUROLOGICAL INJURY IN TEVAR

Anisha Perera - Vascular Surgery, Imperial College London
Gagandeep Grover - Vascular Surgery, Imperial College London
Nund Rudarakanchana - Vascular Surgery, Imperial College London
Abhinav Singh - Department of Neuroradiology, Imperial College London
Richard Gibbs - Vascular Surgery, Imperial College London
Mohamad Hamady - Department of Interventional Radiology, Imperial College London
Presentation Category: Aortic Intervention

Aim: Stroke occurs in 2-8% and silent cerebral infarction (SCI) in 70% of patients undergoing thoracic endovascular aortic repair (TEVAR). This study investigates the feasibility of the cerebral embolic filter protection device (CEPD) to protect the brain from neurological injury during TEVAR.

Materials and Methods: Patients anatomically suitable underwent TEVAR with SCPS, together with intra-operative transcranial Doppler (TCD) of the middle cerebral arteries (MCA), pre- and post-operative diffusion weighted magnetic resonance imaging (DW-MRI), and pre, post and 6- week neurocognitive testing to detect sub-clinical neurological deficit.

Results: Ten patients, mean age 68yrs underwent TEVAR with SCPS. Proximal landing zones range was 1-3; atheroma grade of the aortic arch 1-4. SCPS was successfully deployed and retrieved in all cases. TCD was performed and high intensity transient signals (HITS) were detected in 8 patients. Maximum HITS were detected during stent manipulation & deployment (median76: IQR61.5-153.5), contrast runs (median69: IQR44.5-107.5). CEPD manipulation (median78: IQR44-111). There were no post-operative strokes. Two patients had no new lesions on post-operative DW-MRI, 8 patients had new low volume SCI lesions; number lesions (range1-5), mean total surface area was 54 mm². There has been no neurocognitive decline postoperatively or at 6-weeks. In comparison, previous unit data showed in 31 patients undergoing TEVAR without CEPD, cerebral infarction was detected in 81% and 68% SCI. Mean lesion volume was 94mm². There was an 88% neurocognitive decline in patients with SCIs.

Conclusion: This is the first study to report use of CEPD in TEVAR. It appears safe and feasible with encouraging early results

OXFEVAR: OUTCOMES IN ENDOVASCULAR REPAIR OF COMPLEX ABDOMINAL AORTIC ANEURYSMS IN OXFORD.

Jonathan Durbin - Medical School, University of Oxford
Presentation Category: Aortic Intervention

Aims: This study evaluates the experience and outcomes of Fenestrated Endovascular Aortic Aneurysm Repair (FEVAR) in an experienced UK tertiary care centre (Oxford University Hospitals NHS Foundation Trust); intending to identify complication rates and predictors thereof.

Materials and Methods: Retrospective data from all patients undergoing elective FEVAR in the past three years was collected from: patient notes, clinical imaging, the National Vascular Registry and internal stent-graft and procedure logs. Patient consent was obtained and the study carried out under audit guidelines.

Results: All 22 patients were male, multi-comorbid and mean age was 74.9 years. Mean maximum aneurysm diameter (MAD) was 6.8cm (SD=0.9cm). 62.3% of patients exhibited a good FEVAR outcome with no serious adverse events and 30-day mortality was 9.1%. Endoleak rates at 30 days were 18.2% and re-intervention rates were 22.7%. Deceased patients (at 30 days) had significantly larger MAD when compared to survivors (8.05cm vs 6.69 cm p=0.0015) and also trended towards being older (85.5 years vs 73.8 years p=0.07). Similar trends in age (79.9 vs 73.2 p=0.06) and MAD (7.55 vs 6.53 p=0.09) were observed when comparing patients experiencing serious adverse events and those not.

Conclusions: Given the complex nature of the patients and interventions in Oxford our outcomes are favourable compared to other national and international studies. Our results suggest that greater MAD and age may be important predictors of later mortality and adverse events. Widespread co-morbidity in our cohort highlights the need for detailed analysis of potential FEVAR patients to better discern poor outcome predictors.

RANDOMIZED CONTROLLED TRIAL OF PACLITAXEL-COATED BALLOON ANGIOPLASTY FOR THE TREATMENT OF SYMPTOMATIC CENTRAL VENOUS STENOSIS IN DIALYSIS ACCESS

Stavros Spiliopoulos - 2nd Radiology Department, Interventional Radiology Unit, ATTIKO University General Hospital, Athens, Greece

Panagiotis Kitrou - Interventional Radiology, Patras, University Hospital, Rio, Greece

Panagiotis Papadimitos - Interventional Radiology, Patras, University Hospital, Rio, Greece

Dimitrios Karnabatidis - Interventional Radiology, Patras, University Hospital, Rio, Greece

Presentation Category: Aortic Intervention

Aims: We sought to investigate paclitaxel-coated balloon (PCB) versus plain balloon angioplasty (PBA) for the treatment of symptomatic central venous stenosis in dialysis access.

Materials and Methods: This was a single-center, prospective, randomized trial. From January 2014 to August 2015, 40 patients with a dialysis access and symptomatic central venous stenosis were randomized (1:1) to undergo angioplasty either with a 2?g/mm² PCB (group PCB, n=20) or PBA (group PBA, n=20). Both de novo and restenotic lesions [15/20? (75%) group PCB and 12/20? (60%) group PTA] were included. Primary endpoints were technical success and target lesion primary patency (TLPP). Secondary endpoints included complication rates and factors affecting TLPP. In restenotic lesions in group PCB a separate subgroup longitudinal analysis was performed to compare present with previous treatment (PBA).

Results: TLPP was significantly better for group PCB (Group PCB: 179 days vs. Group PBA: 124.5 days, p=0.026; HR 0.445 CI: 0.217-0.909). There was no significant difference in primary outcomes between AVGs and AVFs (p=0.17), treatment of de novo and restenotic lesions (p=0.33) or prior presence of catheter insertion (p=0.21). No minor or major complications occurred. Longitudinal treatment comparison demonstrated a significant difference in favor of PCB treatment (177 vs. 91days, p=0.01; HR 2.955, CI 1.292-6.760).

Conclusions: In this prospective randomized trial, PCB achieved significantly better results compared with PBA for the treatment of central venous stenosis in patients with dialysis access. Interestingly, longitudinal comparison of treatments in the same patients also showed a significant difference in favor of PCBs.

RATIONALISATION OF SHORT-TERM FOLLOW-UP IMAGING AFTER EVAR

Dylan Roi - Medical School, Cardiff University

Richard D White - Department of Radiology, University Hospital of Wales

Syed AR Musta - Department of Radiology, University Hospital of Wales

Neil Pugh - Department of Medical Physics, University Hospital of Wales

Andrew M Wood - Department of Radiology, University Hospital of Wales

Andrew C Gordon - Department of Radiology, University Hospital of Wales

Presentation Category: Aortic Intervention

Aims: Follow-up imaging strategies after endovascular abdominal aortic aneurysm repair (EVAR) vary widely. Through retrospective review, we sought to evaluate whether our current strategy (including CT imaging at 6 weeks, 6 months and 1 year) is optimal or whether there is potential to avoid unnecessary ionising radiation and contrast administration, and reduce CT waiting lists.

Materials and methods: Using electronic case records and the radiology information system, review of all patients undergoing Medtronic Endurant EVAR over a 4 year period (n=124) was undertaken. Of these, all patients undergoing at least one year of follow-up imaging (n=100) were analysed for complications, further procedures (surgical/radiological) and readmissions within the first year. Any such events were consensus read by two vascular radiologists (in conjunction with imaging, where necessary) to determine whether they would 1) have manifested clinically, and 2) be identifiable on ultrasound.

Results: Complications were observed in 10/100 (10%). All 10 were considered likely to have been visible on ultrasound. 7/10 (70%) either manifested (or were considered likely to manifest) clinically. The 6 month routine CT scan was not considered to change management in any case. Two cases of limb occlusion at 6 months were considered to have had missed (but subtle) thrombus on the initial 6 week CT scan.

Conclusion: Our findings suggest that a routine 6 month CT scan is not necessary as part of EVAR follow-up and has been replaced by ultrasound in our centre. The limbs are now more carefully scrutinised on 6 week CT for even small amounts of thrombus.

TUESDAY 15TH NOVEMBER 2016
SCIENTIFIC SESSION 2 ONCOLOGY INTERVENTION
CHARTER 4 11.15-12.15

DEMONSTRATION OF THE EXTENSION OF MICROWAVE ABLATION (MWA) ZONE ALONG INTRA-HEPATIC VESSELS USING AN EX-VIVO PERFUSION PORCINE LIVER MODEL.

Saurabh Singh - Interventional Oncology, University College London
Pulathis N Siriwardana - Hepatopancreatobiliary and Liver Transplant Surgery Unit, Royal Free London NHS Foundation Trust and University College London
Edward W Johnston - Interventional Oncology Service, University College London
Patrizia Lee - Division of Surgery and Interventional Sciences, University College London
Jennifer Watkins - Department of Cellular Pathology, Royal Free London NHS Foundation Trust
Steven Bandula - Interventional Oncology Service, University College Hospital
Brian R Davidson - Hepatopancreatobiliary and Liver Transplant Surgery Unit, Royal Free London NHS Foundation Trust and University College London
Rowland O Illing - Interventional Oncology Service, University College Hospital
Presentation Category: Interventional Oncology

Aims: MWA has few theoretical advantages over radio-frequency ablation such as reduced heat-sink adjacent to intrahepatic vessels. Although extension of the ablation zone along a major intrahepatic vessel has been reported, this has not been studied previously. A study was designed to investigate this phenomenon.

Materials and methods: Eight fresh porcine livers were perfused in an ex-vivo perfusion system to evaluate extension of MWA zone along vessels. Livers were perfused with 37°C, oxygenated, O-positive human blood. Perfusion was discontinued immediately before ablation in the non-perfused group (n=4) whilst in the perfused group (n=4) perfusion was maintained during MWA (140W X 2min). Ultrasound imaging was used to avoid vessels >10 mm. MWA zones were bisected for macroscopic examination and sampling. Sections were stained with H&E and NADH to assess the cell viability in the ablation zones. Magnetic resonance imaging was performed on two livers (one perfused, one non-perfused) as an imaging correlate before sectioning.

Results: Twenty-one out of a total of 30 ablation zones (77%) showed extension of the ablation zone along a vessel adjacent to ablation sites. This was similar (p=1.0) between perfused (9/13, 69%) and non-perfused arms (12/17, 71%). MRI water selective sequences were best at demonstrating ablation zone extension along blood vessels (Figure 1). Ablation of the perivascular parenchyma was confirmed by lack of NADH staining.

Conclusion: Liver MWA is commonly associated with propagated thermal injury along adjacent vessels and occurs independent of active blood flow. The clinical relevance of this observation requires careful assessment.

LUNG CANCER TISSUE DIAGNOSIS IN POOR LUNG FUNCTION: ADDRESSING THE ONGOING PERCUTANEOUS LUNG BIOPSY FEV1 PARADOX USING HEIMLICH VALVE

Aniket Tavare Radiology, Royal Free London NHS Foundation Trust
Reza Abdullah, Andrew Creamer, Dean Creer, Rama Vancheeswaran, Ash Saini
Sam Hare - Radiology, Royal Free London NHS FT
Presentation Category: Interventional Oncology

Aims: Many centres decline percutaneous lung biopsy (PLB) in patients with poor lung function (particularly FEV1 <1?L) due to perceived risk of pneumothorax, limiting access to novel lung cancer therapies. We examined whether there is a truly increased risk of pneumothorax and intercostal drainage in these patients.

Materials and Methods: Retrospective single-centre analysis of 212 patients undergoing PLB, all performed blinded to lung function. Patients with poor lung function (defined as FEV1 <1?L or TLCO <40% predicted) were compared against those with normal lung function (defined as FEV1 ?1?L or TLCO ?40% predicted) focusing on diagnostic histology, Heimlich valve chest drain (HVCD) insertion and incidence of pneumothorax, hospital admission, and peri-procedural mortality.

Results: HVCD insertion was not associated with poor lung function parameters, with an incidence of 10.7% (3/28) in the low FEV1 group compared with 13.6% (25/184) in the normal FEV1 group (p=0.91), and 17.1% (7/41) in the low TLCO group compared with 12.9% (19/147) in the normal TLCO group (p=0.67). No significant difference found in the incidence of pneumothorax in the low FEV1 group, 25.0% (7/28), compared with 27.2% (50/184) in the normal FEV1 group (p=0.99).

ABSTRACTS - SCIENTIFIC SESSION 2

Binary logistic regression confirmed that neither FEV1 nor TLCO were independent predictors of either the need for intervention with HVCD, or indeed the risk of pneumothorax. In fact, only a smaller lesion size was found to be predictive of HVCD insertion or pneumothorax,

Conclusion: Our data demonstrates that using ambulatory HVCD to treat significant postbiopsy pneumothorax facilitates safe, diagnostic, early discharge lung biopsy irrespective of lung function.

PERCUTANEOUS HEPATIC IRREVERSIBLE ELECTROPORATION: AN OPTION FOR CHALLENGING CASES?

Sebastian Mafeld - Interventional Radiology, Freeman Hospital

Ben Stenberg - Radiology, Freeman Hospital

Jeremy French - Hepatobiliary Surgery, Freeman Hospital

Derek Manas - Hepatobiliary Surgery, Freeman Hospital

Peter Littler - Interventional Radiology, Freeman Hospital

Presentation Category: Interventional Oncology

Aim: Irreversible electroporation (IRE) is an emerging non-thermal ablative option in patients unsuitable for standard thermal ablation, due to its potential to preserve collagenous structures (vessels and ducts) and a reduced susceptibility to heat sink effects. Despite the potential of IRE, clinical data in humans for safety and efficacy is limited.

Materials and Methods: Retrospective, single centre review; 27 percutaneous hepatic IRE ablations (unsuitable for thermal ablation) were performed in 21 patients with mean age 64 years (range 28-86). Tumours treated included primary; (hepatocellular carcinoma n=5, intrahepatic cholangiocarcinoma, n=2) and secondary tumours (colorectal n=10, neuroendocrine n=2, gastrointestinal stromal tumour n=1 and pancreatic cancer n=1). Cases were performed using ultrasound (US), contrast enhanced ultrasound (CEUS), CT and CT/US Fusion.

Results: Mean tumour diameter was 2.3cm (range 0.5-5.2). Complete ablation was achieved in n=23, (85%). Of this group, local recurrence-free survival (LRFS) was determined from the date of ablation to the date of radiographic local recurrence of the target lesion. LRFS at 3 months was 100% (17/17) and 6 months 73% (8/11). An overall complication rate of 22% (n=6) was experienced. Two patients developed transient atrial fibrillation during the procedure, minor pain (n=2), subcapsular haematoma (n=1) and severe sepsis secondary to gallstone cholangitis post procedure (n=1) resulting in death 9 days post treatment.

Conclusion: Percutaneous hepatic IRE can be a useful tool, extending the role of ablation to treat liver tumours unsuitable for thermal ablation. Multi-modality techniques aid the complex needle placements required to enable adequate ablation. We present safety.

EVALUATION OF THE RADIOLOGICALLY GUIDED MICROWAVE ABLATION SERVICE AT NORFOLK & NORWICH

Baljeet Dhillon - Radiology, Norfolk and Norwich Hospitals NHS Foundation Trust

Mark Lewis - Radiology, Norfolk and Norwich Hospitals NHS Foundation Trust

Aser Farghal - Radiology, Norfolk and Norwich Hospitals NHS Foundation Trust

Presentation Category: Interventional Oncology

Aims: We aimed to evaluate the microwave ablation (MWA) service that was relatively recently introduced in our trust in 2013. We intended to quantify our local rates of repeat ablations, complications and survival post ablation.

Materials and methods: A retrospective case review using a database compiled from our PACS was performed, to include cases performed between 2013 and 2015. Patient demographics, initial ablation characteristics, follow-up scan results and complications were analysed.

Results: 27 patients underwent lung ablation. 3 were for primary lesions and 24 for metastases. 4 patients had repeat procedures for residual disease (repeat ablation rate 14.81%). Complications occurred in 16 patients (59.26%) - 15 pneumothoraces (3 required chest drain and 1 required aspiration) with 1 case of haemoptysis and parenchymal bleeding. 4 patients were deceased by 1 year post ablation, with another 1 deceased by 2 years. 25 patients underwent liver ablation. 14 were for primary lesions and 11 were for metastases. 2 patients required repeat ablations for residual disease (repeat ablation rate 8.00%). Complications occurred in 2 patients (8.00%) - 1 case of brachial plexus injury, another of infected necrotic liver lesions. 5 patients were deceased by 1 year post ablation, with another 2 deceased by 2 years.

Conclusions: Low repeat ablation rates of 14.81% in lung and 8.00% for liver lesions are indicative of good overall success of MWA. Survival rates for lung ablations were 85.19% at 1 year and 81.48% at 2 years. Survival rates for liver ablations were 80.00% at 1 year and 72.00% at 2 years.

THE OUTCOMES AND EFFICACY OF THERMAL LUNG ABLATION; 8-YEAR DATA

Sarena Virdee - Radiology, Royal Liverpool University Hospital

Nabil Kibriya - Radiology, Royal Liverpool University Hospital

Jonathan Evans - RADIOLOGY, ROYAL LIVERPOOL UNIVERSITY HOSPITAL

Presentation Category: Interventional Oncology

Aims: Radiofrequency and microwave ablations are commonly used in the treatment pulmonary malignancies. A retrospective study of CT-guided ablations of pulmonary malignancies was performed to evaluate their efficacy and outcome.

Material and methods: A retrospective study was performed on patients diagnosed with either primary or secondary lung malignancy who underwent treatment with CT-guided radiofrequency or microwave ablation over an 8-year period. Review of standardised interval follow-up imaging was undertaken and the outcomes were recorded. Patient demographics and disease status were recorded using the mRECIST criteria. Statistical analysis of the data was performed.

Results: In total, 127 ablations were performed on 90 patients (54 male, 36 female). The majority of patients had lung malignancies due to primary lung carcinomas or colorectal metastases. Of these procedures, 105 were microwave ablations and the remaining 22 were radiofrequency ablations. Targeted lesion sizes ranged from 3 mm to 66 mm. Overall, 52 (41%) cases resulted in procedural complications, of which 45 were pneumothoraces. 29 required intercostal drains. The remaining complications were due to minor pulmonary haemorrhage. The average follow-up time was 9.5 months, and the longest follow-up time was 73 months. At 1 month, 93.7% of cases demonstrated stable disease with no evidence of residual tumour at the ablation site. At the 3-month follow-up, this decreased to 87.4%; at 6 months, to 85.0%; and at 12 months, to 80.3%.

Conclusion: Microwave and radiofrequency ablations have proven to be a safe and effective technique in the treatment of primary and metastatic lung tumours.

OUTCOMES FOLLOWING TREATMENT WITH DEBIRI IN 58 CASES

An Ngo - Interventional Radiology, Royal Liverpool University Hospital

Ben Corbo - Interventional Radiology, Royal Liverpool University Hospital

Jonathan Evans - Interventional Radiology, Royal Liverpool University Hospital

Nabil Kibriya - Interventional Radiology, Royal Liverpool University Hospital

Presentation Category: Interventional Oncology

Aims: To evaluate the technical success, complications and outcomes following transarterial chemoembolisation (TACE) with Irinotecan loaded Drug Eluting Beads (DEBIRI) in the treatment of colorectal liver metastases in 37 patients over an 8 year period.

Material and methods: A retrospective analysis of 37 patients with colorectal hepatic metastases treated with Irinotecan loaded drug eluting beads was performed between 2008 and 2016. Patients received chemoembolisation with microspheres preloaded with Irinotecan with drug delivery to selective hepatic arteries. Primary endpoint was survival. Secondary endpoints included tumour response (RECIST criteria) and safety.

Results: 37 patients received 58 treatments with DEBIRI. Median age of patients was 70 (range 45-88). Contrast enhanced ultrasound was utilised to augment the peri-procedural imaging in 14 cases (24%). Median number of embolisation treatments was 1 (range 1-3). Median drug dose was 100mg (range 50-200mg). Median survival from first treatment was 9.5 months (range 1-92). Progressive disease was noted at 2 month follow up in 24 patients. A partial response was seen at 6 week or 2 month follow up in 15 patients. Technical success rate was 98.3%. There were no immediate post procedural complications. The most frequently documented post-procedural events were pain.

Conclusion: Our data confirms DEBIRI TACE to be a safe and reasonably well tolerated treatment for colorectal liver metastases. Longer term follow up in larger multi-centre registries will be required to further assess its efficacy.

ABSTRACTS - SCIENTIFIC SESSION 2

SCOTTISH MULTICENTER RETROSPECTIVE STUDY INVESTIGATING THE SURVIVAL OUTCOMES IN PATIENTS RECEIVING DOXORUBICIN-ELUTING BEADS VERSUS CONVENTIONAL TRANSARTERIAL CHEMOEMBOLIZATION FOR TREATMENT OF HCC.

Shueh Hao Lim - Department of Interventional Radiology, Edinburgh Royal Infirmary
Peter Douglas - Department of Radiology, Queen Elizabeth Hospital Glasgow
Ram Kasthuri - Department of Interventional Radiology, Queen Elizabeth Hospital Glasgow
Anwar Jamshaid - Department of Radiology, Ninewells Hospital Dundee
Ian Zealley - Department of Radiology, Ninewells Hospital Dundee
Daniel Reynolds - Department of Radiology, Aberdeen Royal Infirmary
Reddi Yadavali - Department of Radiology, Aberdeen Royal Infirmary
Alistair Todd - Department of Radiology, Raigmore Hospital
James Gordon-Smith - Department of Interventional Radiology, Edinburgh Royal Infirmary
Presentation Category: Interventional Oncology

Aims: To compare overall survival in patients with hepatocellular cancer (HCC) treated with conventional lipiodol transarterial chemoembolisation (CTACE) with patients treated with doxorubicin eluding bead transarterial chemoembolisation (DEB) in Scotland.

Methods: 461 patients, across Scotland, who had undergone TACE for HCC, were identified using local databases. 63 patients who had received adjuvant treatment (transplant or ablation) were excluded. Therefore, 398 patients were finally included for comparative analysis (n=215, CTACE; n=183, DEB). Disease classified according to Barcelona-Clinic Liver cancer classification (BCLC).

Results: The 2 groups were matched for gender, age or BCLC score. Childs-Pugh scoring was better in the CTACE group with more patients in category A (174 vs 121patients). Median survival time was 2.5years for CTACE and 1.8years for DEB in our univariate analysis (p=0.13). Multivariate analysis involving BCLC classification, showed no significant difference in medial survival either (CTACE vs DEB: BCLC A, 2.9years vs 2.8years, p=0.68; BCLC B, 2.1years vs 1.5years, p=0.09).

Conclusion: There is no significant difference in survival between patients receiving either CTACE or DEB for HCC, in Scotland. Study results compare favourably with published RCT data. Further health economic analysis required.

Disclosure: The above study has been supported by the BSIR research grant.

WEDNESDAY 16TH NOVEMBER 2016
SCIENTIFIC SESSION 3 PERIPHERAL VASCULAR INTERVENTION
MAIN AUDITORIUM 09.50 -10.45

EFFECTIVENESS OF DRUG-ELUTING BALLOON ANGIOPLASTY VERSUS PLAIN BALLOON ANGIOPLASTY FOR THE TREATMENT OF IN-STENT RE-STENOSIS IN PATIENTS WITH SUPERFICIAL FEMORAL ARTERY STENTS

Mohammed Asim Khan Kabuli - Radiology, Sheffield Teaching Hospitals
Presentation Category: Peripheral Vascular Intervention

Aims: The purpose of this study was to investigate the effectiveness of Drug Eluting Balloon Angioplasty Versus Plain Balloon Angioplasty for the Treatment of In-stent Re-Stenosis in Patient with Superficial Femoral Artery Stents

Methods: This is a retrospective single-institution review of the outcomes of patients with ISR who underwent stenting for SFA occlusive disease between January 2006 and December 2015. ISR is defined as peak systolic velocity ratio (PSVR) of 2.5 or more on duplex ultrasonography. ISR treated with balloon angioplasty were followed-up for a further year with duplex ultrasonography. We compared POBA data with those patients undergoing DEB treatment.

Results: Out of the 68 patients, 32 patients with ISR underwent POBA, achieving 95% technical success. There was an improvement to Rutherford scores, but recurrence of ISR following angioplasty was high at 1 year (68%). The remaining 36 patients had DEB angioplasty. In addition to similar improvement of Rutherford scores and technical success compared to POBA, the recurrence of ISR was significantly lower, log rank $p=0.001$.

Conclusion: Plain balloon angioplasty for ISR following SFA stenting achieves high technical success rates and improves clinical outcomes, but is blighted by high recurrence rates at 1 year. Our data suggests that drug-eluting balloon therapy for ISR significantly improves the patency of the SFA stents compared to POBA.

A COMPARISON OF DRUG COATED BALLOON AND PLAIN BALLOON ANGIOPLASTY FOR FEMOROPLOPLITEAL DISEASE IN REAL WORLD PRACTICE

Rajdeep Jennifer Kaur Dhammi - Radiology, CMFT, University of Manchester
Sam Byott - Radiology, Central Manchester Foundation Trust
Nicholas Chalmers - Radiology, Central Manchester Foundation Trust
Presentation Category: Peripheral Vascular Intervention

Aim: To establish whether drug coated balloons (DCB) confer benefit to patients in "real world" practice.

Methods: A retrospective comparative cohort time-to-event study of all patients undergoing DCB angioplasty of the femoropopliteal segment between June 2013 and May 2015 and an unselected contemporary cohort of plain balloon (PB) angioplasties. The cohorts were compared on a range of criteria for risk factors and disease severity. The primary outcome event was a composite of major amputation, clinically driven target lesion revascularisation or angiographic evidence of restenosis of the index lesion.

Results: 65 cases were included in each cohort. The majority of cases (68%) were critical limb ischaemia. The median lesion length was 8cm. There were total occlusions in 32%. The cohorts were reasonably well matched, with the exception of in-stent restenosis (14 cases) all of which were in the DCB cohort. Fewer stents were used in the DCB group than the PB group (11% vs 31%). At 12 months, freedom from a primary outcome event was similar in the PB angioplasty and DCB cohort (82% Vs 72%, $p>0.05$).

Conclusions: There is no evidence of benefit to patients from the use of DCB in real world practice. This conflicts with the published data that demonstrates a reduction in restenosis and reintervention in selected patients. Explanations for the difference may be due to differences in disease severity or technical aspects of DCB use in real world practice compared with research.

ANGIOSCULPT SCORING BALLOON ANGIOPLASTY IN HEMODIALYSIS FISTULA STENOSIS; EARLY RESULTS.

Umme Sara Zishan - Interventional Radiology, Queen Elizabeth University Hospital
Andrew Christie - Interventional Radiology, Queen Elizabeth University Hospital
Andrew Downie - Interventional Radiology, Queen Elizabeth University Hospital
Ram Kasthuri - Interventional Radiology, Queen Elizabeth University Hospital
Presentation Category: Peripheral Vascular Intervention

Aim: Cohort study of safety and efficacy of the use of Angiosculpt scoring balloons in recurrent haemodialysis fistulae.

Material and methods: Retrospective study. Data collected from local renal database and CRIS. Post angioplasty, technical success was defined as less than 20% residual stenosis following Angiosculpt angioplasty and functional success as good haemodialysis (flow rate and mean pressure during dialysis within normal range). Follow up data at 3 months is presented.

Results: A total of 13 patients, with an average age 60 years. Average age of fistula was 2 years 8 months. There were 10 brachiocephalic fistulae and 3 arterio-venous grafts. Size of treated segment of brachiocephalic fistulas ranged between 6mm to 12mm. Treated segments of arteriovenous grafts ranged between 6mm to 10mm. 8 mm balloon was used in 7 fistulae and 7mm balloon in 6 fistulae. Immediate technical success was achieved in 12/13(92%). Contrast leaked during one procedure. At 3 months post angioplasty 9/10 (90%) patients have had normal flow rate and mean pressure during haemodialysis. 9/10(90%) patients have not required subsequent angioplasties. 1 patient required further procedure within 2 months and had this segment stented. Study is ongoing and more follow up data will be available.

Conclusion: Angiosculpt scoring device in haemodialysis fistulae is safe and its efficacy is promising. Further data and prospective studies would be interesting.

REVIEW OF POPLITEAL AND INFRAPOPLITEAL ANGIOPLASTY IN A MAJOR TEACHING HOSPITAL

Shao Jin Ong - Vascular Interventional Radiology, Leeds Teaching Hospitals
Sapna Puppala - Vascular Interventional Radiology, Leeds Teaching Hospitals
Presentation Category: Peripheral Vascular Intervention

Aims: Advancement in endovascular techniques and available equipment has led to rapid growth in the angioplasty for popliteal and crural vessel disease. A retrospective study was performed to evaluate the success and re-intervention rate at our hospital.

Materials and methods: The total number of procedures performed at our institution between 2007 and 2015 were obtained from our Radiology Information System and analysed.

Results: A total of 1150 popliteal and infrapopliteal angioplasties were performed in 731 patients over the 9 years. Among the 731 patients, 77 (10.5%) patients had two or more intervention of the same lesion over the study period. The average number of days between re-intervention was 461 (SD 493.8, Min 6, Max 2545) days. A total of 246 procedures were performed on these patients, of which 32 (13%) procedures were documented to be difficult, 6 (2%) procedures had utilised a drug elution balloon and stents were deployed in 2 (both popliteal stents) cases. There was one case of popliteal stent fracture, which required re-stenting following occlusion. There were 15 (2%) patients, which had intervention in the same previously treated limb for a different lesion. The average number of days between re-intervention was 292 (SD 583, Min 2, Max 2587) days. A total of 46 procedures were performed in these patients, of which 5 (11%) were reported as difficult and 2 cases (both popliteal) requiring stenting.

Conclusion: Popliteal and crural vessel angioplasty remains a safe and effective procedure for treatment of popliteal and crural vessel disease.

LOCAL PRACTICE REGARDING ENDOVASCULAR MANAGEMENT OF SFA DISEASE: PLAIN BALLOON ANGIOPLASTY (BA) VS ANGIOPLASTY AND STENTING (AS)

Guo Liang Yong - Paediatrics (rotation), Foundation Programme, Ninewells Hospital & Medical School

Jamshaid Anwar - Radiology, Ninewells Hospital & Medical School

Sam Chakraverty - Radiology, Ninewells Hospital & Medical School

Presentation Category: Peripheral Vascular Intervention

Aims: Treatment options for SFA disease include balloon angioplasty with/ without stenting. This study assesses local re-intervention rates based on clinical assessment to better inform patients when seeking their consent.

Material and Methods: A retrospective analysis of plain balloon angioplasty (BA) versus angioplasty and stenting (AS) from March 2014 – February 2016 was performed. Patient demographics, indications for treatment, relevant comorbidities, lesion characteristics and re-interventions were recorded. Interval from primary treatment to first re-intervention was compared between the two groups.

Results: 148 endovascular treatments were performed in 139 patients; 125 BA and 23 AS. Most AS cases were for an SFA occlusion (14/23 - 60.9%) whilst the majority of BA cases were for an SFA stenosis (83/125 - 66.4%). BA performed in 34 cases of IC and 92 cases of CLI. All but one patient i.e 22 (95.7%) in the AS group presented with CLI. A slightly higher proportion in the AS group required re-intervention as compared with the BA group (34.7% vs 23.6%), however, the mean interval to first re-intervention is longer in AS i.e 108 days (54–780 days) compared with BA i.e 27 days (2–560 days) $p=0.033$. Eleven (8.8%) BA patients proceeded to amputation compared with 1 (4.3%) patient in the AS cohort ($p=0.665$).

Conclusion: Most patients treated with BA. AS is used selectively in a minority of cases (14.9%). Re-intervention required in between 23.6% to 34.7%. There is a longer interval to first re-intervention in the AS group compared with BA in our practice

LASER ATHERECTOMY FOR PERIPHERAL ARTERIAL DISEASE - A UK CENTRE EXPERIENCE

Dr Usman Javed Mahay - Imaging, University Hospitals Birmingham NHS Foundation Trust

Dr Asim H Shah - Interventional Radiology, University Hospitals Birmingham NHS Foundation Trust

Dr Jonathan Hopkins - Interventional Radiology, University Hospitals Birmingham NHS Foundation Trust

Dr Martin Duddy - Interventional Radiology, University Hospitals Birmingham NHS Foundation Trust

Presentation Category: Peripheral Vascular Intervention

Aims: Only a handful of centres in the United Kingdom provide percutaneous laser atherectomy as an adjunct to balloon angioplasty for peripheral arterial disease. We assessed the indications and outcomes of patients who underwent this procedure at University Hospitals Birmingham NHS Foundation Trust.

Materials and Methods: Twelve cases over a three-year period were collected using the local PACS and clinic letters from the Clinical Portal system. Indications included in-stent restenosis, non-acute thromboembolic occlusion and tight recurrent stenosis. Site of lesions were predominantly superficial femoral and popliteal arteries. One case involved a subclavian artery. Patients were followed up at 6 – 8 weeks, 6 months and 12 months. Outcome end points were assessed using the Rutherford classification of symptoms and if further target lesion revascularisation was required.

Results: Seven of the 12 cases were technically successful; all 5 of the in-stent restenosis cases were technically successful. Three out of 5 technically unsuccessful cases had thromboembolic disease as the indication. Of the 6 infrainguinal lesions treated, 4 patients improved by a minimum of 2 scales on the Rutherford classification, 1 patient remained on the same scale, albeit a healing ulcer and one stent reoccluded 10 months post procedure.

Conclusion: Percutaneous laser atherectomy as an adjunct to balloon angioplasty may have a role in the management of peripheral arterial disease in selected patients, particularly in in-stent restenosis. Larger prospective studies are needed to verify these findings.

A FEASIBILITY STUDY OF MICROWAVE RADIOMETRY THERMOMETRY FOR THE NON-INVASIVE DIAGNOSIS OF CRITICAL LIMB ISCHEMIA IN DIABETIC PATIENTS.

Lazaros Reppas - 2nd Radiology Department, Interventional Radiology Unit Stavros Spiliopoulos - 2nd Radiology Department, Interventional Radiology Unit, ATTIKO University General Hospital, Athens, Greece

Vasiliki Theodosiadou - Interventional Radiology, Patras University Hospital, Rio, Greece, ATTIKO University General Hospital, Athens, Greece

Panagiotis Kitrou - Interventional Radiology, Patras University Hospital, Rio, Greece

Konstantinos Katsanos - Interventional Radiology, Guy's and St Thomas' Hospitals, NHS Foundation Trust, King's Health Partners, London, UK

Elias Siores - Institute for Materials Research and Innovation (IMRI), Bolton University, Bolton, UK

Elias Brountzos - 2nd Radiology Department, Interventional Radiology Unit, ATTIKO University General Hospital, Athens, Greece

Dimitrios Karnabatidis - Interventional Radiology, Patras University Hospital, Rio, Greece

Presentation Category: Peripheral Vascular Intervention

Aims: We conducted a proof of concept study to investigate the feasibility of microwave radiometry thermometry (MWR) for non-invasive diagnosis of critical limb ischemia (CLI) in diabetic patients.

Materials and Methods: This prospective study included 60 patients divided in four groups (group N: normal patients; group DN: diabetic patients with verified neuropathic ulcers without vascular involvement; group DC: diabetic patients with CLI and group NDC: non-diabetic CLI patients with CLI). Vascular disease was confirmed with diagnostic angiography. All patients underwent MWR (RTM -01-RES; University of Bolton, UK) to record mean tissue temperatures in various pre-determined foot sites. Comparisons of temperature measurements between study groups were performed using One-Way ANOVA and Dunn tests. ROC analysis was performed to determine the sensitivity, specificity of MWR and a cut-off value for diagnosis of ischemic foot disease.

Results: Temperatures recorded in vicinity to the foot ulcers of diabetic CLI patients were similar to those of non-diabetic CLI patients, but significantly lower than in patients with solely neuropathic ulcers and normal patients without vascular involvement (group DC:29.78oC±2.13 vs. group NDC:29.18oC±2.52 vs group N:32.98 oC±0.44 vs. group DN:33.38 oC±1.05; p<0.0001). According to ROC analysis the cut off temperature value to diagnose ischemic foot disease was <32.3 0C (area under the curve:0.937; 95%CI: 0.86-1.00 p<0.001), with a sensitivity of 96.7% (95%CI: 82.8-99.9) and specificity of 84.0% (95%CI: 63.9-95.4).

Conclusions Diagnosis of vascular involvement in diabetic foot disease remains challenging. MWR could be used for the non-invasive definitive diagnosis of arterial ischemia in diabetic foot disease.

WEDNESDAY 16TH NOVEMBER 2016
SCIENTIFIC SESSION 4 GI GU HEPATOBIILIARY
CHARTER 4 09.50 -10.45

1000 NATIVE PAEDIATRIC RENAL BIOPSIES: SUCCESS, OUTCOME & COMPLICATIONS RATES FROM A QUATERNARY CENTRE

Aneeta Parthipun - Interventional Radiology, Great Ormond Street
Presentation Category: GI / Hepatobiliary / Genitourinary

Aim: Report rate of technical success, outcome and complication rate from paediatric native kidney biopsy.

Material and Method: Retrospective review of prospectively maintained IR database and electronic pathology results system (name of system if need include). All native renal biopsies performed in children less than 16 years old between November 1999 and May 2016 at a single quaternary paediatric centre were included. Outcome measures included immediate technical success, immediate and late complications, adequacy of histological samples. In addition, age, glomeruli number, histological data, number of cores, size of the biopsy needle and rate of track embolization/ plugging was recorded.

Results: The study is ongoing. Over a 17 year period , 1000 children (means age, 10.5- SD; age range 0.136 years to 18.15 years) underwent native kidney biopsy (47 left, 953 right). 515 patients were female (51.5%). Mean number of passes with the co-axial needle was 2.7 (range 1-11). 100% had a 16 Gauge needle used. Technical success rate was 100%. Overall complication rate was 1.7%. 6 patients developed haematuria, 3 patients developed perinephric haematomas (2 that were treated conservatively; one patient underwent embolization and subsequently a nephrectomy). 4 patients developed arteriovenous fistulas. 1 patient had post biopsy haemorrhage. 2 patients developed post procedure infections (one at the skin site and the other developed a perinephric collection). Histology results have been reviewed in all patients. Mean number of glomeruli obtained was 26.97 (range 2- 87). A diagnosis was possible in 99.5% of patients.

Conclusion: We present that largest cohort of percutaneous paediatric renal biopsy outcomes.

COVERED DOUBLE COLONIC STENTS: REDUCED MIGRATION - OPTIMUM PATENCY.

Hans-Ulrich Laasch - Dept. of Radiology, The Christie
Andrew Martin - Dept. of Radiology, Sheffield Teaching Hospitals
Thomas Evans - Dept. of Surgery, Royal Glamorgan Hospital
Jon K. Bell - Dept. of Radiology, The Christie
Damian Mullan - Dept. of Radiology, The Christie
Brigid McCormack - Dept. of Radiology, The Christie
Gareth Davies - Dept. of Radiology, Royal Glamorgan Hospital
James Hampton - Dept. of Radiology, Sheffield Teaching Hospitals
Fred Lee - Dept. of Radiology, Sheffield Teaching Hospitals
Derek W. Edwards - Dept. of Radiology, The Christie
Presentation Category: GI / Hepatobiliary / Genitourinary

Aims: To review the outcome after placement of colonic stents constructed of two layers of knitted NiTiNOL with a covering membrane sandwiched in between.

Materials and Methods: Patients receiving covered, double colonic stents from 2 manufacturers (S&G Biotech & TaeWoong) over 5 years in three regional centres were retrospectively reviewed. Outcome data were entered into a custom-built on-line registry, provided by Obsidian Health Ltd. with independent analysis performed by Obsidian. IRB approval was given; the project was supported by a grant from the British Society of Interventional Radiology.

Results: 49 stents were placed in 46 patients (55 attempts, 89% technical success). Primary malignancy was colorectal in 34 (74%) and gynaecological in 7 cases (15%). Median stent length was 10cm (range 5-12cm), median diameter was 24mm (range 20-24mm). Median immediate stent expansion was 50% (range 0-100%). There were no cases of stent occlusion. Stent migration occurred in 13% (7/49) at a mean of 104 days post insertion (range 2-298). Of these, 29% (2/7) did not require another stent due to resolution of symptoms. Overall re-intervention rate was 20% (6 stents, 1 balloon dilatation, 2 endoscopy, 1 caecostomy). Fifteen patients were still alive at the time of reporting with a mean survival rate of 207 days (range 4-1096).

Conclusion: Double knitted, covered colonic stents provide good symptom relief with an apparently low re-intervention rate, seemingly combining benefits of covered and bare stents. Further chemotherapy is associated with stent migration, but these patients do not necessarily require repeat stent insertion.

NITINOL DEGRADATION AS A CAUSE FOR FAILURE OF OESOPHAGEAL STENTS

Steve J. Black - Analytical services, MDECON Ltd
Graham Smith - Department of Natural Sciences, University of Chester
Connor J. Weaver - Department of Chemical Engineering, University of Chester
Derek W. Edwards - Dept. of Radiology, The Christie NHS FT
Hans-Ulrich Laasch - Dept. of Radiology, The Christie NHS FT
Presentation Category: GI / Hepatobiliary / Genitourinary

Aims: To investigate the integrity of the nitinol skeleton in removed oesophageal stents.

Materials and Methods: Oesophageal stents removed from patients following migration were deconstructed to provide samples of wire from degraded areas. The samples were examined by high resolution scanning electron microscopy (SEM), prior to destructive testing on tensile strength apparatus. Following the tensile strength testing the fractured wires were then re-examined using SEM with elemental mapping to evaluate failure modes of the stent wires. Results were compared with matched, unused control samples from the same manufacturers.

Results: 6 stents from 3 manufacturers had been in situ for a median of 70 days (range 7 – 201). During tensile strength testing the control wires showed results within expected standard deviation, whereas the harvested wires from explanted stents either fractured during mounting indicating disintegration of the material structure or demonstrated erratic breaking strain values. The SEM examination of the control wires showed a classic plastic fracture mechanism where the wire thinned under strain and then failed in a circular cross-section symmetry. The wires from removed stent samples showed clear evidence of corrosion. They still exhibited some plastic behaviours to varying extents, but generally failed through the presence of crack propagation features, where damage to the wire surface initiated failure points.

Conclusion: Analysis of removed oesophageal stents demonstrates corrosion and degradation of the nickel-titanium alloy, resulting in loss of elasticity and tensile strength. With longer survival of palliative patients this has important implications for stent design.

RETROGRADE URETERIC STENT RETRIEVAL- A MULTICENTRE EXPERIENCE

Luigi Pancione - Interventional Radiology, Barking, Havering and Redbridge University Hospitals NHS Trust
AbdulRahman Alvi - Interventional Radiology, Barking, Havering and Redbridge University Hospitals NHS Trust
Imran Syed - Interventional Radiology, Barking, Havering and Redbridge University Hospitals NHS Trust
Stefano Pieri - Radiology, Ospedale S Camillo, Rome, Italy
Paolo Agresti - Radiology, Ospedale S Camillo, Rome, Italy
Salma Gul - Radiology, Barking, Havering and Redbridge University Hospitals NHS Trust
Nusra Imran - General Surgery, Barking, Havering and Redbridge University Hospitals NHS Trust
Neveen Hazzaa - Radiology, Barking, Havering and Redbridge University Hospitals NHS Trust
Mohamed Elsayad - Radiology, Barking, Havering and Redbridge Hospitals NHS Trust
Presentation Category: GI / Hepatobiliary / Genitourinary

Background: Ureteric stent exchange is necessary every four to six months to prevent migration, infection and obstruction. Stent placement and retrieval can be performed either by antegrade approach through nephrostomy or in a retrograde manner by endoscopic or fluoroscopic guidance. The purpose of this study is to assess the safety and efficacy of the retrograde exchange of ureteric stent under fluoroscopic guidance by interventional radiologists.

Materials and Methods: Retrospective review of 50 patients who underwent retrograde ureteric stent exchange under fluoroscopic guidance was performed. All patients underwent conscious sedation. In the male patients, all exchanges were performed using a 10Fr introducer sheath and snare under fluoroscopy. After grasping the stent, the sheath, snare and guidewire were pulled out of the urethra. The existing stent was exchanged over a hydrophilic guidewire which was passed through the stent into the renal pelvicalyceal system. In female patients, a clamp was used to grasp the stent and retrieve the distal end through the urethra in preparation for stent exchange.

Results: Successful stent retrieval was achieved in 49/50 patients (98%). Procedure time varied from 20 to 40 minutes. No major complications were encountered.

Conclusions: Retrograde ureteric stent exchange is a safe, quick and effective procedure which can be performed without general anaesthesia, endoscopy or percutaneous renal puncture.

BACTERIAL ISOLATES FROM BILIARY CULTURES OBTAINED DURING PERCUTANEOUS BILIARY INTERVENTION, A MULTICENTRE ANALYSIS

Pavan Najran - Radiology, The Christie Hospital, Manchester, UK
Damian Mullan - Radiology, The Christie Hospital, Manchester UK
Jon Bell - Radiology, The Christie Hospital, Manchester UK
Hans-Ulrich Laasch - Radiology, The Christie Hospital Manchester UK
Presentation Category: GI / Hepatobiliary / Genitourinary

Aim: A multicentre retrospective review of the most common pathogens isolated from biliary cultures in patients undergoing percutaneous trans-hepatic intervention and to assess antibiotic sensitivity ensuring optimal prophylactic antibiotic regime.

Methods and Materials: All percutaneous trans-hepatic interventions performed over a two-year period in three separate centres were reviewed retrospectively. Those where no biliary culture was obtained were excluded. Analysis of the culture results including pathogens grown and antibiotic sensitivity was performed.

Results: A total of 104 patients were included in the analysis, 58 from centre one and 13 from centre two and 33 from centre 3. No pathogens were grown in 15.3% of cultures (n=16). Of those with positive cultures (n=88) Enterococci and Pseudomonas were the most common pathogens grown in 52.3% of cases (n=46). Ciprofloxacin and vancomycin were equally the most sensitive antimicrobials demonstrating sensitivity in 27.3% (n=24) of positive cultures. Gentamycin was the fifth most sensitive antimicrobial demonstrating sensitivity in 20.5% (n=18).

Conclusion: Over the three centres included in the analysis there is no common antimicrobial administered prior to percutaneous biliary intervention. In centre one gentamycin is administered prophylactically, this study has demonstrated this is comparably ineffective with low sensitivity and high resistance requiring a change in protocol. Effective antibiotic prophylaxis requires knowledge of likely pathogens and procedure specific infection risks. However, the choice of antimicrobial is dynamic given the ability of antibiotic resistance to eliminate historically effective regimes.

PLUGGING THE GAP: LIVER TRACT EMBOLIZATION FOLLOWING PTC WITH HEP-PLUG

Dr Anup Mathew - Radiology, Northern General Hospital
Dr Fatemeh Sakhinia - Radiology, Northern General Hospital
Dr Rob Peck - Radiology, Northern General Hospital
Presentation Category: GI / Hepatobiliary / Genitourinary

Purpose: Data from the Biliary Drainage and Stenting Registry (BDSR) maintained by the British Society of Interventional Radiology (BSIR) showed very high mortality and complication rates for percutaneous transhepatic interventions which are being performed in increasing numbers worldwide. Liver tract embolization has been shown to significantly decrease haemorrhagic complications. We present the first-in-man case and also initial results of the Hep-Plug transhepatic tract closure device.

Material and Methods: All patients in whom Hep-Plug was utilised for tract closure following PTC were included (cohort 1). Comparison is made with previously published cohort of patients in the same institution, who had no liver tract embolization (cohort 2, n=101) and off label tract embolization using Hunter biopsy pledgets (cohort 3, n=92). Pre-intervention and 10-day post-intervention mean blood Hb values were recorded, along with post-intervention haemorrhagic complications and blood transfusions.

Results: A total of 37 patients were included. There were no procedure-related blood transfusions or haemorrhagic complications, compared to 12% and 3% in cohort 2 and cohort 3 respectively (p=0.01). Mean difference between pre- and 10-day mean post-intervention Hb was 0.23 g/dL (or a mean drop of 1.8%) in the Hep-Plug cohort compared to 1.4 g/dL in cohort 2 and 0.68 g/dL in cohort 3.

Conclusions: Liver tract embolization following transhepatic procedures significantly reduces haemorrhagic complications. The Hep-Plug device is the first dedicated liver tract closure system with an easy and intuitive mechanism for deployment. The current study confirms its superiority compared to no embolization and off-label tract embolization devices.

PALLIATION FOR OBSTRUCTIVE JAUNDICE - CAN WE SELECT PATIENTS?

Ganesh Alluvada - Radiology, Northampton General Hospital

Asaad Osman - Medicine, Northampton General Hospital

Ali Habib - Medicine, Northampton General Hospital

Presentation Category: GI / Hepatobiliary / Genitourinary

Aim: Percutaneous biliary interventions for jaundice in patients with inoperable cancer involving the biliary tract are associated with high morbidity and mortality with a 30 day mortality of over 40%. This is a very invasive procedure in the palliative setting. We set forward to see what criteria help us give the best chance to these patients and reduce the 30 day risk.

Materials and Methods: Data was collected on 43 patients who underwent percutaneous biliary interventions between July 2011 and March 2016. All patients had malignant obstructive jaundice and were inoperable. Data included pre and post intervention liver function, renal function, performance status (PS) (WHO score), complications and outcome. Information was collated from case notes, clinic letters, radiology systems, lab results and death certifications. The data set was divided chronologically into 2 groups; Group 1 (July 2011 to November 2014)- 31 patients in which PS was not used as a selection criterion, and Group 2 (December 2014 to March 2016) - 12 patients in which PS was ?2.

Results: Group 1 had a 30-day mortality rate of 48.4% (15/31). Pre intervention; 40.0% (6) were septic and 33.3% (5) had deranged renal function. 61.3%(19/31) had disseminated malignancy. 36.8%(7/19) died within 30-days. Group 2 had a 30-day mortality rate of 16.7% (2/12). 83.3%(10/12) had disseminated malignancy. Sepsis and renal impairment rates were similar.

Conclusion: Performance status is a single independent factor which can lead to significant reduction in 30 day mortality rates. Patients with PS \geq 3 perform poorly and should not be intervened upon.

ABSTRACTS - SCIENTIFIC SESSION 5

THURSDAY 17TH NOVEMBER 2016
SCIENTIFIC SESSION 5 FARRAGO
MAIN AUDITORIUM 11.30 -12.30

CLINICAL OUTCOME OF SCLEROTHERAPY IN LYMPHATIC MALFORMATIONS.

Sam Stuart - Interventional Radiology, Great Ormond Street Hospital for Children
Daniel Barnes - Interventional Radiology, Hospital Clinic I Provincial de Barcelona, Barcelona, Spain
Fernando Munoz Gomez - Interventional Radiology, Hospital Clinic I Provincial de Barcelona, Barcelona, Spain
Dr Alex Barnacle - IR, Great Ormond Street Hospital for Children
Derek Roebuck - IR, Great Ormond Street Hospital for Children
Premal A Patel - IR, Great Ormond Street Hospital for Children
Presentation Category: Miscellaneous

Aims: To assess clinical outcome of lymphatic malformations treated by sclerotherapy and compare response between malformation morphology.

Materials and Methods: Retrospective review of clinical records and a prospectively collected database.

Inclusions: All patients with lymphatic malformations treated over a 14 year period, by ultrasound guided sclerotherapy, with standardised technique using one of several sclerosants.

Exclusions: Patients with incomplete clinical information, or multiorgan lymphangiomas. Data including patient demographics, symptoms (pain and/or swelling), sclerosant & technique used, complications & lesion morphology and location was recorded. A clinical outcome score from 1 to 5 was assigned (1 complete response, 2 good, 3 partial, 4 poor, 5 no response). Statistical analysis performed with SPSS Statistics for windows v22 (IBM Corp.Armonk, NY)

Results: 216 patients underwent 487 procedures (mean of 2.4 range from 1 to 8 procedures per patient). Lesion morphology was: 47% macrocystic, 17% microcystic and 36% mixed. Grade 1 treatment response was observed in 28 (13%) patients, grade 2 in 71(33%), grade 3 in 59 (27%), poor in 41(19%) & no response in 17 (8%). Macrocystic lesions had a statistically significant improved clinical response to treatment compared to mixed or microcystic lesions. ($p=0.001$ IC=0.99). Despite this 65% of patients with microcystic or mixed lesions did demonstrate an improvement in symptoms. Complications included infection (2%), skin injury (0.5%), and nerve injury (0.2%).

Conclusion: Sclerotherapy is an effective treatment of lymphatic malformations, 73% of patients had a partial to complete response. Macrocystic lesions have improved outcome following treatment although mixed and microcystic lesions often respond to treatment.

AUDIT ON COMPLIANCE WITH RADIATION PROTECTION MEASURES WITHIN FREEMAN IR DEPARTMENT.

Nadia Mcallister - Interventional Radiology, Freeman Hospital
Presentation Category: Management Audit and Service Review

Aims: In 2012 International commission on radiological protection recommended reducing the annual dose limit to the lens of the eye from 150 to 20mSv. This was based on the new evidence for development of cataracts at much lower radiation exposure. The new dose limits are now incorporated into EU statutes with all European member states obliged to comply by February 2018. The aim of this audit was to inspect compliance with radiation protection measures within Freeman IR department in accordance with new legislation.

Methods: First and second audit data were collected prospectively for the duration of 2 weeks (March and April 2016 respectively). The data on the use of head screens, leg screens, leaded glasses and extra wings were recorded by IR radiographic staff for each IR procedure without the operator's knowledge.

Results: The first audit cycle results were presented at the Departmental Meeting. The results of the second audit cycle, compared to those of the first cycle, showed a significant improvement in the use of head screens (63% vs 6%, $p<0.0001$) and leaded glasses (95% vs 66%, $p<0.0001$), with sustained standards in the use of leg screens (88% vs 92%). The results were more consistent within the dedicated IR team who perform the bulk of IR procedures.

Conclusion: This audit demonstrates that staff awareness and training are paramount and make significant improvement in the compliance rates. If unshielded, the dose to the lens of the eye exceeds significantly the new annual dose limit, which will negatively impact on the IR productivity and service provision.

DO TARIFFS COVER COSTS? A PATIENT-LEVEL COSTING ANALYSIS

Trevor Cleveland - Interventional Radiology, Sheffield Vascular Institute, Northern General Hospital

Edward Mulkern - Surgery, Sheffield Vascular Institute, Northern General Hospital

David R Bassenger - Vascular Services, Sheffield Vascular Institute, Northern General Hospital

Presentation Category: Management Audit and Service Review

Aim: To compare the costs and tariff income for two alternative treatments for peripheral artery disease (PAD) to assess alignment of right care and right payment incentive within HRG4.

Materials and Methods: We selected a group of patients from a UK hospital over the 2014-2015 period with atherosclerosis of arteries of extremities, with or without gangrene as per ICD classification. We utilised the HRG classification to identify the open surgical and endovascular groups, with the dominant procedure relating to artery disease. For cost comparison a patient level indicative costs (PLICS) database was used. The device cost was excluded from the total procedure cost. 2014/2015 HSCIC national prices were used.

Results: Overall the average cost of elective patients (EL) without gangrene (n=69) was lower for endovascular compared to surgical treatment: £1,499 vs £4,745 without comorbidity and complications (CC) and £1,396 vs. £4,674 with CC, respectively. The main driver for the cost difference is reduced length of stay in endovascular treatment (2 vs. 7 days for elective patients independent of the CC level). The reimbursement of elective procedures with no CC is less than tariff (£1,023 for endovascular and of £4,268 for surgery) whilst for cases with CC the hospital margin for surgery is higher than for endovascular treatment (tariffs of £7,005 and £1,480 respectively).

Conclusion: Treating PAD with endovascular treatments consumes fewer resources. Open surgery is perversely financially advantageous for the hospital when treating CC. Considering current reimbursement, endovascular treatment is underfunded outside of the excluded device tariff.

OUTCOMES OF PERCUTANEOUS PORTAL VEIN INTERVENTION IN A SINGLE UK PAEDIATRIC LIVER TRANSPLANTATION PROGRAMME

Ravi Patel - School of Clinical Medicine, University of Cambridge

Rope Naveen - Department of Radiology, Leeds General Infirmary

Nasim Tahir - Department of Radiology, Leeds General Infirmary

Jai Patel - Department of Radiology, Leeds General Infirmary

Presentation Category: Miscellaneous

Aims: To describe the mid and long-term outcomes of treatment of portal vein (PV) stenosis/thrombosis following paediatric liver transplantation.

Materials and methods: 218 children received 247 transplants between 01/11/2000 and 31/02/16. Median age at transplantation was 3.28 years (range 0.05-17.75). 17 patients developed portal vein stenosis or thrombosis: 1 patient had operative PV reconstruction at the time of transplantation, 2 had no treatment, and 14 had percutaneous intervention. Retrospective clinical, procedural and outcome data on the latter 14 patients was collected and is presented.

Results: 14 patients, median age 0.9 months (range 0.3-8.1), underwent 30 procedures with percutaneous transluminal angioplasty (PTA) or stenting. 26 had PV stenosis and 4 had PV thrombosis. Treatment was with primary PTA with stenting reserved for suboptimal PTA result or restenosis <3 months. 20 procedures were performed with PTA and 10 with stenting. Median trans-stenotic pressure gradients of 11mmHg (range 2-22) and 2mmHg (range 0-10) were measured pre and post intervention. Technical success (>50% reduction in mean pressure gradient or absolute pressure gradient \geq 4mmHg) was achieved in 29 procedures. Failure to recanalise a thrombosed PV occurred in 1 procedure. There were no procedural complications. Patients were followed up with serial surveillance Doppler ultrasound. Kaplan-Meier estimated median primary patency was 6 months, with primary assisted patency of >90% at median follow-up of 23.5 months (range 2.4-170.4).

Conclusion: Good patency rates can be achieved following percutaneous intervention for post transplantation portal vein stenosis/thrombosis in paediatric patients.

CODING – ITS MORE IMPORTANT THAN YOU THINK!!

Pavan Najran - Radiology, The Christie Hospital, Manchester, UK
Damian Mullan - Radiology, The Christie Hospital, Manchester UK
Hans-Ulrich Laasch - Radiology, The Christie Hospital, Manchester UK
Jon Bell - Radiology, The Christie Hospital, Manchester UK
Presentation Category: Management Audit and Service Review

Background: Coding is essential part of current clinical practice defined as the transformation of healthcare diagnosis, procedures, medical services, and equipment into universal medical alphanumeric codes. This allows clinicians to perform clinical procedures and translate them into financial terms.

Aims: A retrospective assessment of ultrasound interventional procedures, to review and record discrepancies between the procedures performed and the code assigned to such procedures.

Methods: A retrospective review was carried out of all ultrasound interventional procedures performed in a single centre over a one-year period. The codes assigned for the procedures were recorded from the CRIS (Clinical radiology Imaging System) system and this was compared to the actual procedure performed, recorded from the radiology report. All those cases with discrepancies between the procedure performed and the code assigned were recorded and translated into financial cost based on local tariffs.

Results: There were a total of 148 discrepancies out of 780 procedures performed. The most common discrepancy occurred in patients coded for a simple abdominal drain insertion where an abdominal tunnel drain insertion was the actual procedure performed 32.9% (n=49). The tariff cost for this discrepancy totalled 10,096 pounds with all discrepancies costing the department 12,168.39 pounds.

Conclusion: Coding for procedures is a complex process but requires careful consideration. This project demonstrated a significant discrepancy between procedures performed and the codes assigned. This translates to a substantial financial cost and therefore careful procedure coding is essential particularly in the current financial climate.

INTERVENTIONAL RADIOLOGY TRAINING IN THE UK – A TIME FOR A CHANGE IN DIRECTION?

Fatemeh Sakhinia - Vascular Radiology, Sheffield Vascular Institute
Trevor J Cleveland - Vascular Radiology, Sheffield Vascular Institute
Stephen D Goode - Vascular Radiology, Sheffield Vascular Institute
Presentation Category: Miscellaneous

Aims: Interventional radiology is a shortage specialty with areas of under provision across the UK. The joint workforce document published in 2014 by the RCR and BSIR estimated a shortfall of 200 IR consultants. To address this it was suggested that there needed to be an increase of at least 25 IR trainees per year. The aim of our work was to assess the current conditions and challenges to IR training in the UK.

Materials and Methods: Following discussions at the BSIR AGM in November 2015, on behalf of the BSIR trainees committee, a national survey, with RCR support, was offered to all radiology trainees (ST1-ST6 and Fellows) across the UK, using survey monkey.

Results: 300 responses were obtained. A large proportion (62%) of responders considered that following the introduction of the revised Vascular Surgery curriculum; they had seen compromise to their IR training. 5% reported any form of reciprocal surgical training. There was limited access to clinical activities (ward rounds and outpatient clinics). 54% of trainees indicated a reluctance to consider a career choice in IR.

Conclusion: This represents the largest survey on IR training since imaging and endovascular skills were included in the VS curriculum. A core criterion set to facilitate the introduction of VS training was that there would be no compromise to IR training and that there would be reciprocation. This survey indicates that in a number of regions this priority has not been met and an indication that recruitment may be affected at a time when IR numbers need to increase.

PATIENT SATISFACTION WITH CONSENT PROCESSES IN INTERVENTIONAL RADIOLOGY

Justine Sullivan - Radiology, Leeds General Infirmary

Christopher Hammond - Interventional radiology, Leeds General Infirmary

Amy Gilmour - Interventional radiology, Leeds General Infirmary

Martyn Wilson - Interventional radiology, Leeds General Infirmary

Presentation Category: Management Audit and Service Review

Aims: RCR consent guidance for IR states that information should be offered "...in sufficient time before the procedure [for patients] to consider it and to consult others if they so wish" and that consent discussions should occur "...on a hospital ward... ..or in an outpatient facility". GMC consent guidance states that clinicians must ensure "...patients have been given enough time and information to make an informed decision". The current structure of UK IR services means that most patients are consented immediately pre-procedure. This practice is potentially in breach of RCR and GMC guidelines.

Materials and Methods: We wished to establish the degree of satisfaction with consent processes in our department. Patients undergoing IR procedures between 01.12.2015 and 31.03.2016 were offered a short questionnaire about their experience of consent.

Results: 646 patients underwent a procedure in the study period of whom 198 (31%) completed a questionnaire. Median understanding pre-consent was 4 (0-5, 5="full understanding"). Patients undergoing a procedure for the first time had a median of 3.5. New information (which the patient was previously unaware of) was offered in 75 (39%) of patients. 96% considered there was sufficient time to weigh up information to make a decision. 6% wanted to come to a separate consent clinic. Median satisfaction with the consent process was 5 (0-5 scale, 5="completely satisfied")

Conclusion: Our results indicate that patients are overall well informed about the procedures they undergoing even if consent is formally obtained immediately pre-procedure, and that consent processes are RCR and GMC compliant.

THURSDAY 17TH NOVEMBER 2016
SCIENTIFIC SESSION 6 EMBOLISATION
CHARTER 4 11.30 -12.30

THE EMERGENCE OF POLYHYDROPHOBIC INJECTABLE LIQUID (PHIL) AS A NOVEL EMBOLIC AGENT IN THE VASCULAR SYSTEM

Nadeem Shaida - Department of Radiology, Cambridge University NHS Foundation Trust
Presentation Category: Embolisation

Aims: To describe the use of PHIL, a novel embolic agent, in central and peripheral vascular interventions

Materials & Methods: Case based review of multiple uses of PHIL in type II endoleak and arteriovenous malformation cases.

Results: PHIL is a novel DMSO based non adhesive embolic agent. It relies on covalently bound iodine to the polymer to be visible under fluoroscopy and CT. It has a number of advantages over other similar embolic agents such as Ethylene Vinyl Alcohol Co-Polymer (Onyx). Chief amongst these is the lack of "glare" artefact produced on follow up CT imaging, the lack of skin staining seen in peripheral AVM cases and the possibility of rapidity of injection.

Here, technical features of 4 cases employing this new embolic agent are described. These include cases of peripheral AVM embolisation and the first reported cases worldwide of type II endoleak embolisation with PHIL. Specific features such as microcatheter selection, embolic concentration choice, embolic material preparation and volume selection are reported.

Conclusion: PHIL is a novel embolic agent that can be safely used in peripheral vascular interventions. Clear advantages over conventional embolic material exist. Although more experience with this material will be required, it holds great promise for the future as an additional tool for the Interventional Radiologist

EFFECTIVENESS OF SUPERIOR HYPOGASTRIC NERVE BLOCK IN PAIN MANAGEMENT FOLLOWING UTERINE FIBROID EMBOLISATION

Akash Prashar - Radiology, Norfolk and Norwich University Hospital
Kelvin Tan - Interventional Radiology, Norfolk and Norwich University Hospital
Aser Farghal - Interventional Radiology, Norfolk and Norwich University Hospital
Presentation Category: Embolisation

Aim: Post embolisation syndrome following Uterine fibroid embolisation (UFE) is a recognised side effect. Our conventional practice for severe pain management is opioid based patient controlled analgesia (PCA). Recently we complemented PCA with superior hypogastric nerve block (SHNB) for better pain control. We evaluated our service to establish the standards of changed practice and its effectiveness in management of post embolisation pain control.

Materials and Methods: A comparative retrospective review of 12 patients undergone UFE with SHNB against conventional practice in control group (12 patients) selected randomly. A detailed review of patient notes, radiology reports, drug charts and electronic discharge summaries provided the assessment of pain scores, PCA attempts and PCA consumption. Data was statistically analysed and compared using Mann-Whitney test.

Results: The average pain scores in both groups were comparable. However the average PCA attempts/hr in control group was 17 in comparison to 5.8 in SHNB group (p value 0.31). The average PCA consumption in control group was 5.6mg/hr compared to 4.4 mg/hr in SHNB group (p value 0.31). We observed superior pain control with SHNB in terms of PCA attempts and average PCA consumption in first fifteen hours. No complication related to SHNB or UFE was reported.

Conclusion: Looking at the trend, the pain is better managed in patients where PCA is complemented with SHNB. The study is statistically limited due to small sample size. We plan to do a prospective study with larger sample size.

THE USE OF RADIOLOGY FOR HAEMORRHAGE CONTROL IN LOWER GASTROINTESTINAL BLEEDING: RESULTS FROM A NATIONAL COMPARATIVE AUDIT

Kathryn Oakland - Clinical Research, NHS Blood and Transplant

Paul Babra - Clinical Audit, NHS Blood and Transplant

John Grant-Casey - Audit, NHS Blood and Transplant

Vipul Jairath - Division of Gastroenterology, Western University and London Health Sciences Centre, London, Ontario, Canada

Richard Guy - Department of Colorectal Surgery, Oxford University Hospitals

Neil Mortensen - Department of Colorectal Surgery, Oxford University Hospitals

Mike Murphy - Clinical Research, NHS Blood and Transplant

Raman Uberoi - Department of Interventional Radiology, Oxford University Hospitals

Presentation Category: Embolisation

Aims: The role of Radiology in lower gastrointestinal bleeding (LGIB) includes rapid, accurate diagnosis and treatment with CT angiography (CTA), mesenteric angiography (MA) and embolisation. The aim of this audit is to assess the management of LGIB patients presenting to UK hospitals. This report focuses on the use of interventional radiology (IR).

Materials: All hospitals that routinely admit LGIB in the UK were invited to participate. Consecutive cases presenting between September and December 2015 were included and data on investigation, treatment and outcome were collected until death, discharge or 28th day of admission.

Results: 139 hospitals identified 2528 cases of LGIB. 58/2528 (2.3%) presented with shock, 149 (6.1%) underwent CTA, 37 (1.5%) MA, 19 (0.8%) embolisation and 6 (0.2%) laparotomy. Extravasation of contrast was demonstrated on 45/149 (30.0%) initial CTAs, 23/45 (51.1%) leading to angiography. The median time from CTA to MA was 130 minutes (IQR 0-228) and 15/23 waited >60 minutes. Diverticular disease and angiodysplasia were the most common pathologies requiring embolisation, most frequently in the left side of the colon. Microcoils were the most common agent. 7/19 embolised patients re-bled; 1 required further embolisation and 2 required surgery. 1/19 developed colonic ischaemia that required laparotomy. 85/2528 (3.4%) patients died, 4/2528 (0.2%) due to LGIB.

Conclusion: This audit provides a contemporary report on the use of Radiology in the management of LGIB in UK hospitals. Presentation with shock was uncommon and embolisation was rarely performed. Patients that were candidates for IR often experienced delays between CTA and MA.

LONG TERM OUTCOMES OF SELECTIVE TRANS-CATHETER ARTERIAL EMBOLIZATION FOR THE MANAGEMENT OF INTRACTABLE BLADDER BLEEDING.

Lazaros Reppas - 2nd Radiology Department, Interventional Radiology Unit, ATTIKO University General Hospital, Athens, Greece

Maria Tsitskari - 2nd Radiology Department, Interventional Radiology Unit, ATTIKO University General Hospital, Athens, Greece

Stavros Spiliopoulos - 2nd Radiology Department, Interventional Radiology Unit, ATTIKO University General Hospital, Athens, Greece

Chrisostomos Konstantos - 2nd Radiology Department, Interventional Radiology Unit, ATTIKO University General Hospital, Athens, Greece

Konstantinos Palialexis - 2nd Radiology Department, Interventional Radiology Unit, ATTIKO University General Hospital, Athens, Greece

Elias Brountzos - 2nd Radiology Department, Interventional Radiology Unit, ATTIKO University General Hospital, Athens, Greece

Presentation Category: Embolisation

Aims: To evaluate the feasibility, safety and long-term efficacy of super-selective trans-catheter arterial embolization for the management of intractable bladder bleeding.

Materials and Methods: The records of 20 patients with intractable life-threatening haematuria referred for selective arterial embolization after failed conventional therapy between 2008 and 2015 were retrospectively analyzed. Primary outcomes were technical (cessation of extravasation and/or stasis of flow within the target vessel) and clinical (bleeding control) success. Secondary outcomes included complication and re-intervention rates.

Results: Technical success was 90% (18/20 cases). In 2 cases, embolization was not feasible. Super-selective embolization of the vesical arteries was feasible in 15/18 cases (83.3%), while in three cases (16.6%) selective proximal occlusion of the anterior division of the internal iliac artery was performed. Bilateral and unilateral embolization was performed in 10 and 8 cases, respectively. Mean time follow up was 22±12 months. There was 1/18 procedure related death (5%) due to myocardial infarction ten days following non-target embolization of the buttocks and the anterior abdominal wall. Bleeding reoccurred in three patients (16.6%), all successfully managed (one conservatively and two with further embolization). Clinical success was 85% (17/20 cases). During follow up four more patients died, due to underlying conditions not related to bleeding.

Conclusions: Super-selective embolization of the vesical arteries was feasible and effective to control refractory bladder hemorrhage and should be considered as a first line treatment, as to obviate the need for emergency surgery.

TRANSARTERIAL EMBOLIZATION IN PALLIATING HAEMORRHAGIC TUMOURS: A MAJOR CANCER CENTRE'S EXPERIENCE

Janarthan Suntharanathan - Radiology, The Royal Marsden Foundation Trust
Nasir Khan - Radiology, The Royal Marsden NHS Foundation Trust
James McCall - Radiology, The Royal Marsden NHS Foundation Trust
Presentation Category: Embolisation

Aims: Haemorrhage is common in patients with advanced cancer; interventional radiologists are key to the management of haemodynamic compromise, symptom palliation and patient distress. We performed a review to assess the efficacy and outcomes of transcatheter arterial embolization for haemorrhage as a complication of advanced cancer.

Materials and Methods: Retrospective data was collected over a 4-year period, including patient gender, age, primary tumour, haemorrhagic and embolization sites, embolization material, outcome, post embolization, transfusion requirements, complications, CCU length of stay and overall survival. Review of the service was classified as an audit by the IRB.

Results: 31 patients were referred for tumoral related bleeding; the sites of tumour were the stomach (7), duodenum (5), bladder (2), liver (5), pancreas (3), kidney (4), pelvic/peritoneal mass (2), groin (1), chest wall (1) and pulmonary (1). Angiography demonstrated active bleeding in 24 patients; tumour blush in 7 patients, all patients were embolized. Surgical intervention for persistent bleeding was required in 2 patients; no procedure related complications. 7 patients required admission to CCU. 30 day mortality was 9.6% (3/31). 6-month OS rate was 42% (13/31).

Conclusion: The spectrum of advanced cancer patients presenting with bleeding is broad. Selection of appropriate management strategies to control bleeding, palliate symptoms and relieve distress is important. Image guided techniques are gaining prominence. They are increasingly relied upon in oncological centres due to their minimally invasive nature over traditional treatments. They offer effective and safe control of bleeding and improve quality of life in patients with advanced cancer.

PROSTATE ARTERY EMBOLIZATION FOR THE TREATMENT OF BENIGN PROSTATIC HYPERPLASIA: A PROSPECTIVE SINGLE-CENTER STUDY

Marco Salsano - Interventional Radiology, Guy's and St Thomas' NHS Foundation Trust
Vincent Helyar - Interventional Radiology, Guy's and St Thomas' NHS Foundation Trust
Narayanan Thulasidasan - Interventional Radiology, Guy's and St Thomas' NHS Foundation Trust
Aneeta Parthipun - Interventional Radiology, Guy's and St Thomas' NHS Foundation Trust
Shahzad Ilyas - Interventional Radiology, Guy's and St Thomas' NHS Foundation Trust
Rick Popert - Urology, Guy's and St Thomas' NHS Foundation Trust
Tarun Sabharwal - Interventional Radiology, Guy's and St Thomas' NHS Foundation Trust
Presentation Category: Embolisation

Aims: To evaluate the clinical efficacy and safety of prostatic artery embolization (PAE) in patients with acute urinary retention caused by benign prostatic hyperplasia (BPH).

M&M: PAE was performed in 120 consecutive patients affected by BPH using 100 and 200 polyvinyl alcohol particles. Inclusion criteria were moderate to severe lower urinary tract symptoms refractory to ≥6 months of medical therapy; prostate volume (PV) ≥40cc; International Prostate Symptom Score (IPSS) ≥19 or quality of life score (QoL) ≤3 or peak urinary flow rate (Qmax) <12ml/sec or acute urinary retention or hematuria. Magnetic resonance imaging, uroflowmetry, and IPSS were used to assess clinical and functional outcomes.

Results: Defined as reduction in IPSS of ≥4 points, clinical success was of 81.3% at 3 months and of 78.6% at 12 months. Mean QoL decreased from 4.45 to 1.775 at 3 months and 1.556 at 12 months (p<0.0001). The international index of erectile function did not show significant change. Mean PV reduced from 142.5cc to 106.1cc (25% average loss of volume; p=0.04). Mean post-void residual and mean Qmax reduced respectively from 187.4ml to 149.7ml and from 15.7ml/sec to 19ml at 3 months (p=0.22; p=0.25), rebounding respectively to 159.8ml and 15.9ml/sec at 12 months (p=0.54; p=0.96).

Conclusion: PAE is an effective, safe and feasible procedure, with preliminary results and short-term follow-up suggesting good symptom control without sexual dysfunction, associated with prostate volume reduction. PAE is suitable for the treatment of BPH and may play an important role in patients with unsuccessful medical therapy, high anesthetic/surgical risk or who refuse standard invasive treatments.

UTERINE ARTERIES EMBOLISATION (UAE) IN THE MANAGEMENT OF MASSIVE POSTPARTUM HAEMORRHAGE: A REVIEW OF ONE CENTER EXPERIENCE IN THE GULF REGION

Jamal ALDeen ALKoteesh - Medical Imaging Institute, Al Ain Hospital, Alain, UAE

Mohammed Zeki Ahmed - Medical Imaging Institute, Al Ain Hospital, Alain, UAE

Presentation Category: Embolisation

Aim: To evaluate the outcome of UAE in massive postpartum haemorrhage associated with abnormal placenta attachment and uterine atony in our centre in United Arab Emirates.

Materials and Methods: Between Sept 2013 and Aug 2015, 40 women were referred to the interventional radiology either urgently due to massive postpartum haemorrhage or electively due to abnormal placenta attachment. The technical success, outcome, and complication were retrospectively reviewed.

Results: The mean age was 31 years. The median blood loss was 2000 ml. 32 patients with abnormal placental attachment and eight patients with uterine atony. Sixteen patients underwent bilateral internal iliac arteries balloon placement prior to Caesarean section (CS) and inflated should bleed occur. A 24 patients underwent placement of catheter selectively in the both uterine arteries origin prior to CS and embolisation should bleed occur. A primary technical success was achieved in 95% of cases. One patient from the balloon placement group had hysterectomy and another patient required repeat embolisation. There was no major complication related to the procedure. Minor complications include; vessels spasm and temporary throboembolic event which seen in balloon placement group. Controversy exists as regarding the use of occlusion balloons vs catheters placement. In our institute, the practice has changed in favour of catheters placement prior to the CS because of some complications and ineffectiveness

Result: In our institute the outcome of UAE in massive postpartum haemorrhage is similar to western institutes. UAE is an effective treatment of obstetric haemorrhage, with a low complication rate and preserve fertility.



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ANNUAL MEETING 2017



28TH - 29TH SEPTEMBER 2017

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POSTER LIST - SCIENTIFIC

EMBOLISATION:

- 1 **SP000499** **TECHNICAL END POINT IN UTERINE FIBROID EMBOLISATION: DOES IT AFFECT POST PROCEDURE PAIN AND OUTCOME?**
Jennifer Hill, Aneurin Bevan University Health Board
- 2 **SP000514** **PREOPERATIVE PERCUTANEOUS TRANSCATHETER EMBOLIZATION OF HYPERVASCULAR METASTATIC TUMOURS OF LONG BONES: A SINGLE CENTRE EXPERIENCE**
Mandela Thyoka, Sheffield Teaching Hospitals
- 3 **SP000546** **ANGIOSEAL IN INADVERTENT ARTERIAL PUNCTURE**
Ali Alsafi, Imperial College Healthcare NHS
- 4 **SP000577** **NORMAL ANATOMY AND VARIANTS OF THE RIGHT TESTICULAR VEIN**
James Aylward, University of Oxford
- 5 **SP000663** **UTERINE ARTERY EMBOLISATION: A CASE REVIEW SERIES**
Kelvin Choi, University Hospital of South Manchester
- 6 **SP000668** **A SYSTEMATIC REVIEW EXAMINING THE USE OF TRANSCATHETER ARTERIAL EMBOLIZATION IN THE TREATMENT OF HAEMARTHROSES**
Usman Raja, Imperial College Healthcare NHS Trust
- 7 **SP000699** **USING CLINICAL MEASURES TO PREDICT THE OUTCOME OF PORTAL VEIN EMBOLISATION**
Lorna Luo, Leeds University
- 8 **SP000705** **CLINICAL OUTCOMES OF PATIENTS WITH NON-VARICEAL UGI BLEEDS TREATED WITH ARTERIAL EMBOLISATION**
Alex Nath, Ninewells Hospital
- 9 **SP000751** **VARICOCOELE PERCUTANEOUS EMBOLISATION - A MAJOR SUCCESS**
Abeeku Hammond, University hospital South Manchester

GU GU HEPATOBILIARY:

- 10 **SP000494** **COMPLICATION RATES IN PERCUTANEOUS NEPHROSTOMY CATHETER INSERTION IN RENAL TRANSPLANT PATIENTS**
Geoffrey Chow, Royal Free Hospital
- 11 **SP000525** **A 10-YEAR RETROSPECTIVE REVIEW OF PERCUTANEOUS BILIARY DRAINAGE OF MALIGNANT BILIARY OBSTRUCTION AT GUY'S AND ST THOMAS' NHS FOUNDATION TRUST.**
Kiran Reddy, Guy's and St Thomas' NHS Foundation Trust
- 12 **SP000539** **PAEDIATRIC ULTRASOUND GUIDED RENAL BIOPSY: A RE-AUDIT OF LOCAL PRACTICE**
Peter Douglas, Queen Elizabeth University Hospital Glasgow
- 13 **SP000541** **ADEQUACY AND COMPLICATION RATES OF PAEDIATRIC LIVER BIOPSY: A COMPARISON BETWEEN PAEDIATRIC INTERVENTIONAL RADIOLOGISTS, GENERAL INTERVENTIONAL RADIOLOGISTS AND GASTROENTEROLOGISTS?**
Alfred Tan, Department of Radiology
- 14 **SP000550** **5 YEARS SINGLE CENTRE EXPERIENCE OF BILIARY DILATATION FOR BENIGN BILIARY STENOSIS. SUCCESS RATES AND COMPLICATIONS**
Amir Helmy, Addenbrookes hospital Cambridge
- 15 **SP000565** **A SERIES OF 136 ULTRASOUND GUIDED LIVER BIOPSIES UNDERTAKEN AT UNIVERSITY HOSPITALS LEICESTER IN 2015.**
Bhavini Billimoria, University Hospitals Leicester NHS trust

POSTER LIST - SCIENTIFIC

- 16 SP000582 **PRIMARY RADIOLOGICAL GASTROSTOMY FOLLOWING ACUTE STROKE**
Anubhav Datta, Stockport NHS Foundation Trust
- 17 SP000640 **PERCUTANEOUS TRANSHEPATIC BILIARY DRAINAGE AUDIT AT A TERTIARY LIVER CENTRE.**
Oliver Morgan, Birmingham Medical School, Birmingham
- 18 SP000641 **A COMPARISON OF LOCAL OUTCOMES OF PERCUTANEOUS BILIARY INTERVENTION (PBI) TO NATIONAL OUTCOMES.**
Maria McGill, Royal Victoria Hospital Belfast
- 19 SP000656 **SEPSIS AND BLEEDING POST TRUS BIOPSY OF THE PROSTATE. CAN WE IDENTIFY THOSE AT INCREASED RISK?**
Tomas Austin, Portsmouth NHS Trust
- 20 SP000662 **INPATIENT MORTALITY IN BILIARY INTERVENTION FOR OBSTRUCTIVE JAUNDICE**
Jamshaid Anwar, Ninewells Hospital & Medical School
- 21 SP000698 **MEDIAN ARCULATE LIGAMENT SYNDROME: A SINGLE CENTER EXPERIENCE WITH 23 PATIENTS.**
Maria El Homsy, American University of Beirut Medical Center
- 22 SP000725 **SUPINE NEPHROSTOMY: TECHNIQUE, COMPLICATIONS AND BENEFITS**
Conrad von Stempel, University College London
- 23 SP000728 **ENDOVASCULAR TREATMENT FOR ACUTE MESENTERIC ISCHAEMIA: A SYSTEMATIC REVIEW AND META-ANALYSIS**
Marawan El Faragy, Pennine Acute Hospitals NHS Trust
- 24 SP000729 **GLOW-DISCHARGE MASS SPECTROMETER ANALYSIS OF NITINOL SAMPLES FROM PERISHED OESOPHAGEAL STENTS.**
DeAnn Barnhart, NU Instruments
- 25 SP000752 **ONE STAGE VERSUS TWO-STAGE ANTEGRADE URETERIC STENTING: A SAFE PROCEDURE LEADING TO A SHORTER INPATIENT STAY.**
Dr Georgina Moritz, Royal Cornwall Hospitals Trust

INTERVENTIONAL ONCOLOGY:

- 26 SP000528 **DOXORUBICIN DEB-TACE EFFICACY AND OUTCOMES IN UNRESECTABLE HCC**
Dr Haseeb Chaudhary, Mersey School of Radiology
- 27 SP000530 **PLUG THAT GAP: SAFE AND EFFECTIVE BIOPSY TECHNIQUES WITH GELATINE SPONGE SEALING DEVICES AT A MAJOR CANCER CENTRE**
Janarthan Suntharanathan, The Royal Marsden NHS Foundation Trust
- 28 SP000608 **A CASE SERIES OF 156 PALLIATIVE OESOPHAGEAL STENT INSERTIONS AT UNIVERSITY HOSPITALS LEICESTER**
Vini Billimoria, Leicester Royal Infirmary
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Henry Walton, University College Hospital London
- 30 SP000724 **AN AUDIT OF PERCUTANEOUS LUNG BIOPSY – SAFETY AND DIAGNOSTIC ADEQUACY**
Mohammed Shawgi, JCUH
- 31 SP000742 **PROVISION OF INTERVENTIONAL ONCOLOGY SERVICES IN THE UNITED KINGDOM: PILOT STUDY**
Jim Zhong, St James University Hospital

POSTER LIST - SCIENTIFIC

MANAGEMENT AUDIT AND SERVICE REVIEW:

- 32 SP000496 **TRANSPLANT RENAL ARTERY STENOSIS ANGIOPLASTY AND STENTING: THE LIVERPOOL EXPERIENCE**
An Ngo, Royal Liverpool University Hospital
- 33 SP000502 **RETROSPECTIVE AUDIT OF HICKMAN LINE OUTCOMES**
Mark Macmillan, Western General Hospital Edinburgh
- 34 SP000509 **IMPROVING THE QUALITY OF INTERVENTIONAL RADIOLOGY MORBIDITY & MORTALITY MEETING**
Martin Hennessy, Queen Elizabeth University Hospital, Glasgow
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Robert Bradley, Scunthorpe District General Hospital
- 37 SP000602 **PRE-OPERATIVE CT ANGIOGRAM PROTOCOLS FOR TRAUMA PATIENTS RECEIVING LOWER LIMB FREE FLAPS**
Edward Walton, North Bristol NHS Trust
- 38 SP000604 **PATIENT INFORMATION AUDIT**
Andrew Walker, Royal Infirmary of Edinburgh
- 39 SP000605 **KEEPING TRACK OF CAVAL FILTERS**
Benjamin Hawthorn, King's College London
- 40 SP000618 **WHO CHECK-LIST IMPLEMENTATION AUDIT**
Zafar Hashim, University Hospital of North Midlands
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Akash Prashar, Norflok and Norwich University Hospital
- 42 SP000696 **PAIN RELIEF IN A RADIOLOGY DAY UNIT**
Amir Helmy, Addenbrookes hospital Cambridge
- 43 SP000714 **INTRODUCING A CATHETER DIRECTED THROMBOLYSIS SERVICE FOR THE TREATMENT OF HIGH AND INTERMEDIATE RISK PE**
Mohammed Hadi, Oxford University Hospital
- 44 SP000727 **ONE BED MAKES THE DIFFERENCE**
Nicholas Mowbray, Wrexham Maelor Hospital

MISCELLANEOUS:

- 45 SP000506 **AWARENESS, KNOWLEDGE AND INTEREST OF INTERVENTIONAL RADIOLOGY AMONG FINAL YEAR MEDICAL STUDENTS IN THE UNITED KINGDOM.**
Peter Atiiga Huddersfield Royal Infirmary
- 46 SP000537 **EVALUATION OF DOSE REDUCTION BY PARTIAL EXPOSURE DURING CT GUIDED INTERVENTION**
Thea Buchan, UCLH
- 47 SP000573 **PLAYSTATION MIGHT NOT BE SO BAD FOR YOU AFTER ALL!**
Zaid Alsafi, University College London

POSTER LIST - SCIENTIFIC

- 48 SP000585 **FINAL YEAR MEDICAL STUDENTS' AWARENESS OF INTERVENTIONAL RADIOLOGY.**
Zaid Alsafi, University College London
- 49 SP000589 **THE CATEGORISATION OF MULTIPLE PATHOLOGY ABDOMINAL CT RADIOLOGY FREE-TEXT REPORTS USING NATURAL LANGUAGE PROCESSING AND MACHINE LEARNING TECHNIQUES**
Sam Dluzewski, Royal Free London NHS Foundation Trust
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Marawan El Faragy, Pennine Acute Hospitals NHS Trust
- 53 SP000672 **STUDY OF FEASIBILITY OF IVC FILTER RETRIEVAL, RETRIEVAL COMPLICATION AND CAUSES OF FAILED RETRIEVALS**
Cheng Fang, King's College Hospital
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- 55 SP000701 **A NEW PERSPECTIVE FOR PICC LINE INSERTIONS: OUTCOMES FROM ONE CENTRE IN THE UNITED ARAB EMIRATES**
Mohammed Zeki Ahmed, Al Ain Hospital, Al Ain, UAE
- 56 SP000719 **ANGIOPLASTY AND STENTING OF TRANSPLANT RENAL ARTERIES: 10-YEAR EXPERIENCE FROM A UK TRANSPLANT CENTRE**
Mark William Little, Oxford University Hospitals NHS Trust
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Colin O'Rourke, The Adelaide and Meath Hospital (Tallaght Hospital)
- 58 SP000723 **TRANS-GLUTEAL DRAINS: DO YOU HAVE TO BE CRUEL TO BE KIND?**
Neil James Young, Ninewells Hospital, Dundee
- 59 SP000740 **OUTCOMES OF ANGEL CATHETER USE FOR PULMONARY EMBOLISM PROPHYLAXIS IN POLYTRAUMA PATIENTS IN A LEVEL 1 UK TRAUMA CENTRE**
Mohammed Rashid Akhtar, The Royal London Hospital

PERIPHERAL VASCULAR INTERVENTION:

- 60 SP000627 **IVC FILTER RETRIEVAL RATES AND REASONS FOR NON-RETRIEVAL**
Saira Sayeed, Leeds Teaching Hospitals
- 61 SP000629 **SUPERFICIAL FEMORAL ARTERY ANGIOPLASTY: AN AUDIT OF OUTCOME**
Fathallah Islim, Royal Liverpool University Hospital
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Andrew Walker, Royal Infirmary of Edinburgh

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AORTIC INTERVENTION:

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Ravjit Sagoo, Dudley Group of Hospitals NHS Foundation Trust

EMBOLISATION:

- 64 EP000674 **ANATOMICAL VARIANTS ENCOUNTERED DURING VARICOCOELE EMBOLISATION**
Menelaos Philippou, Queen Elizabeth University Hospital Glasgow
- 67 EP000651 **ENDOVASCULAR BASICS OF EPISTAXIS MANAGEMENT AND COMPLICATIONS**
Bella Huasen, NorthWest Deanery
- 66 EP000522 **AN INNOVATIVE APPROACH FOR A LEAKY CHEST; PERCUTANEOUS THORACIC DUCT EMBOLISATION.**
Amit Gupta, Guy's and St Thomas' NHS Foundation Trust
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Edward Lake, Manchester Royal Infirmary
- 68 EP000498 **THE ROLE OF INTERVENTIONAL RADIOLOGY IN THE DIAGNOSIS AND MANAGEMENT OF PULMONARY ARTERY ANEURYSMS**
Thomas Micic, University Hospital of Wales
- 69 EP000540 **TIPS AND TRICKS FOR SUCCESSFUL EMBOLIZATION OF PULMONARY ARTERY ANEURYSMS**
Vincent Helyar, Guy's and St Thomas' NHS Foundation Trust

INTERVENTIONAL ONCOLOGY:

- 70 EP000533 **PSOAS ABSCESS AND DISCITIS FOLLOWING RADIOFREQUENCY ABLATION OF A RENAL TUMOUR: A PICTORIAL CASE REVIEW**
Simon Zakeri, Royal Liverpool University Hospital NHS Trust
- 71 EP000581 **IMAGING FINDINGS POST RADIO-FREQUENCY ABLATION: WHAT DOES THE RADIOLOGIST NEED TO KNOW?**
Kiran Reddy, Guy's and St Thomas' NHS Trust

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- 72 EP000578 **PERCUTANEOUS NECROSECTOMY AND DRAINAGE FOR INFECTIVE NECROTISING PANCREATITIS: IS OPEN NECROSECTOMY OBSOLETE?**
Luigi Pancione, Barking, Havering and Redbridge University Hospitals NHS Trust
- 73 EP000622 **PERCUTANEOUS CHOLECYSTOSTOMY AS AN ALTERNATIVE TREATMENT OF CHOLECYSTITIS COMPLICATED BY GALL BLADDER RUPTURE AND CHOLECYSTOENTERIC FISTULA IN POOR SURGICAL CANDIDATES**
Luigi Pancione, Barking, Havering and Redbridge University Hospitals NHS Trust
- 74 EP000606 **PICTORIAL REVIEW OF BILIARY AND ENTERIC STENTS, WHAT A RADIOLOGIST NEEDS TO KNOW.**
Pavan Najran, The Christie Hospital, Manchester, UK
- 75 EP000601 **ERRORS OR PITFALLS IN URORADIOLOGY INTERVENTION**
Cherian George, University Hospitals of North Midlands

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MISCELLANEOUS:

- 76 EP000575 **TRANSCATHETER AORTIC VALVE IMPLANTATION (TAVI): WHAT THE RADIOLOGIST NEEDS TO KNOW.**
Syed Abdur Rahman Mustafa, University Hospital of Wales
- 77 EP000545 **IS INTERVENTIONAL RADIOLOGY BECOMING THE FORGOTTEN MODALITY AMONGST RADIOGRAPHY STUDENTS?**
Kayleigh Hackett, University of Bradford
- 78 EP000491 **PERCUTANEOUS CRYOABLATION IN TREATMENT OF INTRACTABLE PAIN**
Sebastian Mafeld, Sunderland Royal Hospital
- 79 EP000750 **EARLY EXPERIENCE OF USING CO2 ANGIOGRAPHY USING THE CO2MMANDER SYSTEM**
Ramita Dey, Bedford Hospital NHS Trust
- 80 EP000715 **RECURRENT THROMBOSIS SECONDARY TO HEPARIN INDUCED THROMBOCYTOPENIA (HIT) FOLLOWING VENOUS RECANALISATION AND STENTING**
Mohammed Hadi, Oxford University Hospital
- 81 EP000639 **ASSESSMENT OF LIVE DONORS FOR RENAL TRANSPLANTATION**
Chris Williams, University Hospital of Wales
- 82 EP000621 **PERCUTANEOUS FLUOROSCOPIC THORACOSTOMY. HAS CT SUPERSEDED THE ART OF FLUOROSCOPIC DRAINAGE AND IS THERE STILL A NEED TO RETAIN THIS SKILLSET?**
Luigi Pancione, Barking, Havering and Redbridge University Hospitals NHS Trust

PERIPHERAL VASCULAR INTERVENTION:

- 83 EP000677 **ANGIOSEAL: TECHNICAL SUCCESS AND COMPLICATIONS**
Frank Carey, Norwich Radiology Academy

THE U FOUNDATION

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**CYCLE FROM LONDON TO PARIS WHILST RAISING MONEY
TO HELP OTHERS AT THE SAME TIME**

THE U FOUNDATION LONDON TO PARIS 30TH MAY - 3RD JUNE 2017



The Ride

Cycling from London to Paris is an amazing 4 day event covering 300 miles, starting on the outskirts of London and finishing at the magnificent Eiffel Tower in Paris. We cycle through some of the most beautiful countryside in South Eastern England and then wind our way down through Northern France. Our route takes us through part of the Somme region, and allows opportunities to stop at some of the First World War cemeteries along the way.

How much does it cost?

To sign up we require £100 registration fee, and ask participants to raise at least £1250 in donations, £750 of which needs to be raised eight weeks prior to the event, since part of this sponsorship is used to pay the ride costs. All money raised from the event goes towards projects that The U Foundation supports.

What's included?

4 nights accommodation and all meals are included during the event. There will also be two support stops each day, which include water and high energy drinks and snacks. The ride is fully supported by an experienced team who are responsible for marking the route, as well as providing mechanical support and encouragement along the way.

Is it for me?

The London to Paris cycle challenge is achievable by anyone who is up for a challenge, can ride a bike, and is willing to put the time in to do some training. We do provide a training guide and plenty of information to help you prepare for the ride and to keep you updated before the event.

Where does the sponsorship money go?

The U Foundation, has been supporting the people of Zambia for over 10 years. Our focus is on the provision of education, encouraging children as young as 3 years old to enjoy and explore learning through play. These children live in mud huts with no electricity or running water. They all face the daily challenges of malnutrition and disease, many living with HIV and AIDS. Thanks to previous rides we have built the Siankaba Community Trust School, providing the children in one remote community with a safe and secure environment to play and learn. The school is well stocked with books and toys, has a spacious outdoor play area and a vegetable garden allowing children to learn the importance of subsistence farming. The school is fully powered and equipped with running water and toilets. Many of the children walk several miles to get to school, often starting the day with no food. The school has introduced a daily feeding programme, giving each child a hot nutritious meal. For some this will be the only meal that they receive that day. With continued support our plan is to now assist these children through primary, secondary and further education, giving them the opportunity to build a better life for themselves.



For more information on the projects that we support please visit:

www.theufoundation.org

www.facebook.com/theufoundation

For more details, or to sign up for the London to Paris cycle challenge please contact:

Sarah@theufoundation.org

BSIR 2017

ANNUAL MEETING



MEETING ANNOUNCEMENT

1ST-3RD NOVEMBER 2017
THE ICC, BIRMINGHAM

ABSTRACT SUBMISSION OPENS 1ST APRIL 2017
DEADLINE FOR ABSTRACTS: 20TH JUNE 2017

FOR ALL MEETING & EXHIBITION INFORMATION:

British Society of Interventional Radiology (BSIR)
63 Lincoln's Inn Fields | London WC2A 3JW
Tel: +44 (0)20 7406 5998 | Email: office@bsir.org | Web: www.bsir.org



THE 3RD BSIR IOUK MEETING



THURSDAY 18TH MAY 2017

**IET GLASGOW: TEACHERS BUILDING
ST ENOCH SQUARE, GLASGOW, G1 4DB**

FOR ALL INQUIRIES:

British Society of Interventional Radiology (BSIR)
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