

The art of intervention: describe a case where interventional radiology played a major role in treating the patient and what you learnt?

Whilst on elective in Interventional Radiology, I was involved in a case involving the acute management of an Upper Gastrointestinal Bleed (UGIB). The case describes a 67 year old patient who presented to Accident and Emergency at the Doncaster Royal Infirmary with frank haemoptysis, abdominal pain and a deteriorating conscious level. The patient had a longstanding history of dyspepsia. Clinically, the patient was in haemodynamic shock, and a decision was rapidly made to transfer to endoscopy for assessment whilst the patient received blood product resuscitation.

Due to the volume of extravasation, endoscopic view was limited and yielded inconclusive results. The clinicians were unable to achieve haemostasis through banding or stapling in endoscopy. As the patient remained refractory to endoscopic treatment, angiographic imaging and trans-catheter intervention were the second-line therapies of choice.

Access for endovascular angiography was gained via ultrasound-guided femoral artery puncture. On angiographic evaluation, digitally subtracted CT examination revealed active extravasation from the right gastric artery which was in-keeping with the clinical presentation. After identifying the site of active bleeding, coil embolisation was performed by inserting micro-coils into the supplying vessel. No leaks were observed following deployment. The patient was subsequently returned to the ward for ongoing care in a stable condition.

Interventional Radiology offers diagnostic imaging which can be promptly proceeded by endovascular therapeutic interventions in the event of a positive finding. In particular, the role of Interventional Radiology becomes clear in patients, such as in this case, with conditions which are refractory to conventional first-line management. The mechanisms of repair which are facilitated by Interventional Radiology provide a unique minimally invasive option of treatment which is often more suitable for the critically ill patient who cannot withstand major surgery. For this patient in particular, Interventional Radiology was able to offer both a diagnostic and therapeutic service which allowed them to survive a presentation with a very poor clinical prognosis.

From this case, I have had the opportunity to learn in greater depth about the clinical management of UGIBs. Whilst I was not present during the initial assessment of the patient, I found it very informative to look back through their clinical notes. I was able to use this experience to further my knowledge of the management of an acutely ill patient as part of my finals preparation. I have had the opportunity to research further into the physiology and aetiology surrounding UGIBs – particularly into the formation and common location of ulcers, the vascular and gross anatomy of the stomach and the first stages in acute management of UGIBs.

The case has also confirmed my interest in Interventional Radiology as a future specialty. The appreciation of complex anatomy combined with an understanding of the acute management of critically ill patients allowed the radiologist to perform a multifaceted procedure and achieve haemostasis in a severely unstable patient. Such an assortment of skills is something I am inspired to work towards in my prospective career.

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