

Describe an interesting case you have encountered which had a huge impact on the patient or you personally

Introduction:

After my fourth year of medical school, it was time to follow the elective rite of passage of travelling to an exotic land to “work”. However, I wanted to use that time to gain more than a holiday. I am about to start my career as a junior doctor and I needed to think seriously about career options. I had always found radiology a mysterious area of medicine, tucked away in the most hidden recesses in the hospital. Therefore, I set off to the exotic land of Leeds. I wanted to see if there was more to this speciality than looking at images in dark rooms and I was pleasantly surprised. Through my six weeks of radiology experience, I came to learn about interventional radiology.

Case Study:

A 65 year old man had been radiologically diagnosed with hepatocellular carcinoma (HCC). Two lesions were over 3cm, with no know metastasis, determining this to be an intermediate stage B HCC. The Child-Pugh scoring system was used to assess the prognosis of the tumour. This was comprised of 5 measurements of total bilirubin, serum albumin, prothrombin time, ascites and hepatic encephalopathy to give a score between 5 and 15 points (1,2). This patient scored 8 giving him a Child-Pugh B. This gives a 1 and 5 year survival rate of 62% and 20%, respectively (1,2). The Barcelona-Clinic Liver Cancer (BCLC) approach to HCC management aided the decision to offer non-curative transarterial chemoembolization (TACE), see Figure 1 (3).

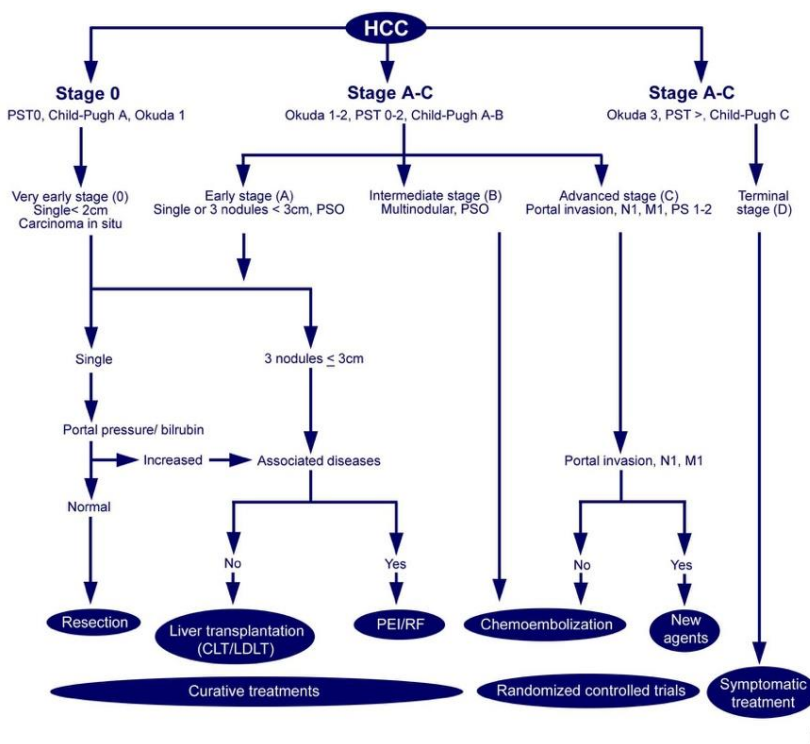


Figure 1: BCLC approach to HCC management. Adapted from source 3.

TACE is a minimally invasive procedure which uses small beads coated in chemotherapeutic agents to restrict the blood supply to tumors and deliver a high dose of chemotherapy. This was a challenging procedure as the hepatic artery was an anatomical variant, the right hepatic artery arose from the superior mesenteric artery and the patient did not speak English. The long term survival benefit in unresectable hepatocellular carcinoma has been shown to be much better than patients who do not receive TACE (Figure 2) (4).

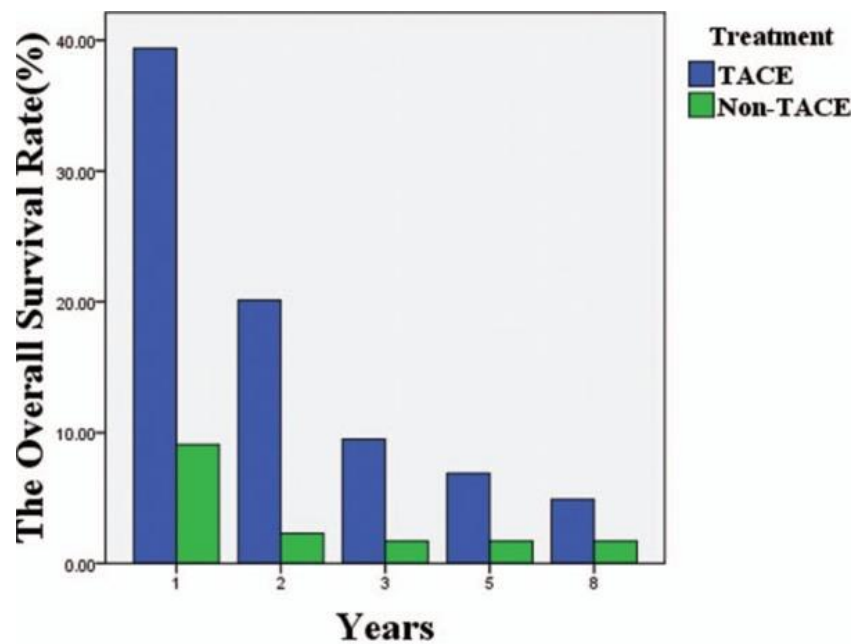


Figure 2: Survival rates of the TACE and non-TACE groups at 1, 2, 3, 5, and 8 years ($P < .05$), adapted from source 4.

Reflection:

This case showed me the importance of the multidisciplinary team. The radiologist was dependent on the radiographer to acquire good views of the hepatic arteries and the specialist nurse assisting the procedure allowed every tool to be ready at a moment's notice. The radiographer was dependent on the translator informing the patient of when to hold their breath to acquire clear images. The team working together allowed the patient to have a much greater chance of extending their life expectancy.

In conclusion, interventional radiology is an area of medicine poorly understood by medical students, yet it drastically impacts all areas of medicine from diagnosis to treatment. This experience changed how I view radiology and I would fully encourage any medical students or junior doctors to explore this varied, interesting and exciting career.

References:

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