Right atrial tumour mass of unusual origin

A 76 year old man was admitted with a four month history of progressive swelling of both legs and abdominal distension. He was icteric with bilateral pitting oedema to both groins. His abdomen was distended with prominent superficial vasculature and evidence of ascites. The jugular venous pressure was not raised. The chest x ray showed a normal cardiac silhouette with clear lung fields. An ultrasound scan revealed a well demarcated mass of 10 cm diameter within the right lobe of the liver. Initial blood tests revealed an elevated bilirubin of 41 μmol/l but normal α fetoprotein at 2 kU/l (normal range 0–8 kU/l). A liver biopsy confirmed the mass to be a well differentiated hepatocellular carcinoma. Transthoracic and transoesophageal echocardiography showed a mass (5 cm x 4 cm) within the right atrium protruding from the inferior vena cava (AV, aortic valve; LA, left atrium; RA, right atrium; T, tumour). A contrast enhanced computed tomographic (CT) scan of the upper abdomen showed that the tumour extended into the inferior vena cava and was contiguous with the right atrial mass. Multiple nodes were visualised surrounding the porta hepatis. The patient received palliative treatment and died 10 months after the date of presentation. Unlike tumours originating from the kidney, it is unusual to find an hepatocellular carcinoma extending from its origin to within one of the cardiac chambers.

Artefactual occlusion of the left subclavian artery during graft angiography

A 67 year old man, who had undergone coronary artery bypass graft surgery two years previously, represented with crescendo angina. Repeat diagnostic coronary and graft angiography demonstrated severe native coronary disease with a patent radial artery graft to the posterior descending artery and a severely and diffusely diseased saphenous vein graft to the obtuse marginal. Cannulation of the left subclavian artery to facilitate visualisation of the left internal mammary artery graft proved technically difficult, because of an inability to advance the 0.038 inch J wire beyond an apparent occlusion of the vessel proximally (left panel).

Following administration of intra-arterial glyceryl trinitrate and alteration of the position of the patient’s arm from behind the head to by his side, the subclavian artery was well visualised (middle panel) and the internal mammary graft shown to be free of disease. Returning the arm to its original position behind the head again resulted in compression of the left subclavian artery immediately beneath the clavicle (right panel). Percutaneous intervention was then successfully undertaken to the culprit lesion in the proximal left circumflex.

Prolonged positioning of the left arm behind the head during graft angiography may result in compression of the left subclavian artery between the clavicle and the first rib anteriorly; repositioning of the arm by the side alleviates artefactual occlusion and facilitates visualisation of the left internal mammary artery.