

Acute Limb Ischaemia – Distal SFA Occlusion



1A.



1B.



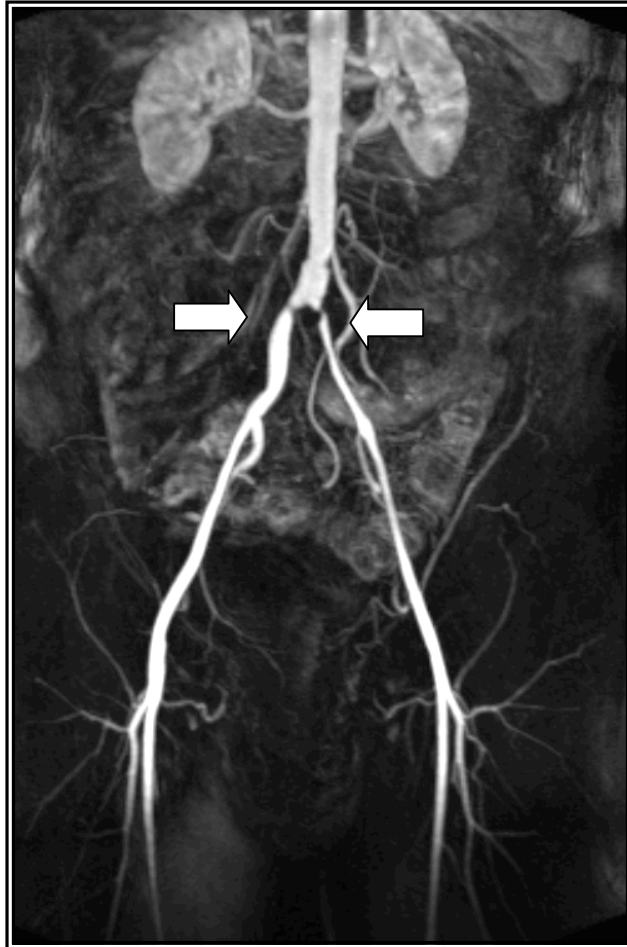
1C.



1D.

Figure 1. (A): An 84 year-old female presented with a necrotic left heel ulcer and gangrenous toes. An MRA revealed a short occlusion of the superficial femoral artery at the adductor canal (white arrow). (B): Subsequent DSA prior to the angioplasty demonstrates the same occlusion. (C): The patient underwent balloon angioplasty with a 5mm balloon. (D): Completion angiography demonstrates re-expansion of the SFA occlusion. There is also disease noted within the popliteal artery which was also treated with angioplasty.

Chronic Limb Ischaemia – Bilateral Iliac Stenoses



2A.



2B.



2C.



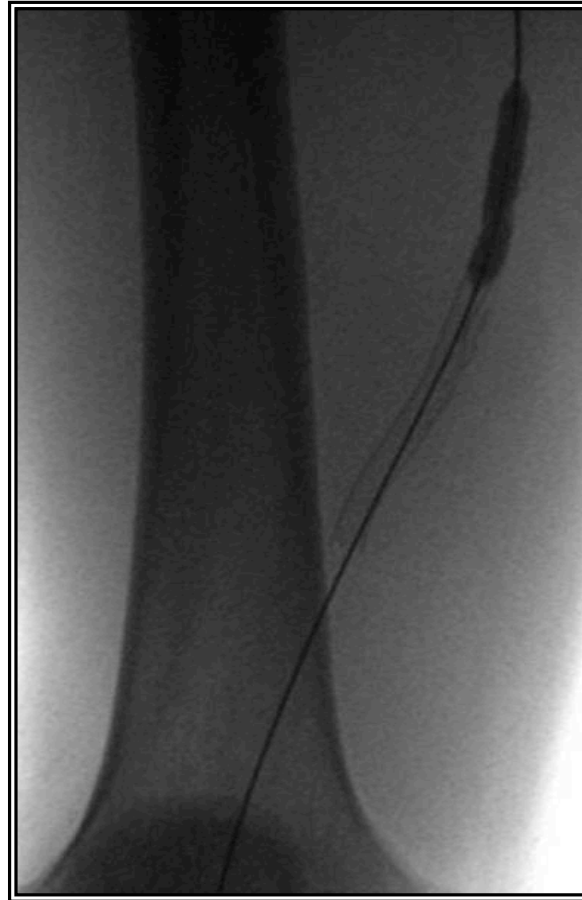
2D.

Figure 2. (A): A 60-year-old man with claudication at 100m (presenting with bilateral buttock, thigh and calf pain) underwent an MRA that showed a tight stenosis at both iliac artery origins, later demonstrated by a DSA **(B)**. **(C):** Two 10 x 40 mm 'kissing' iliac stents were placed across the proximal bilateral common iliac arteries. **(D):** Post procedure completion angiography demonstrates good stent placements with re-expansion of the stenosis.

Chronic Limb Ischaemia



3A.



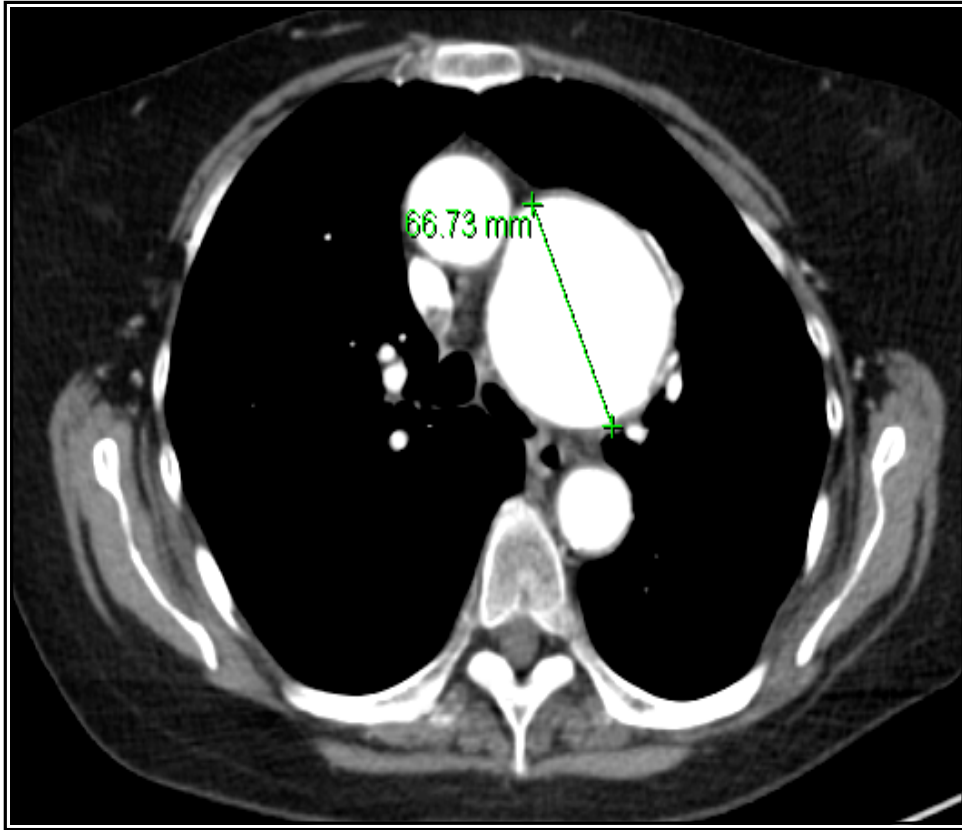
3B.



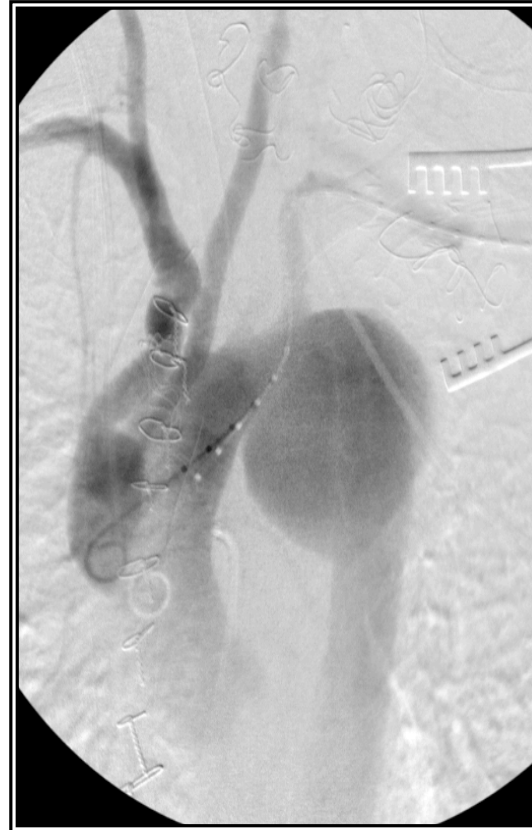
3C.

Figure 3. An 79 year old male with a history of rest pain, worse at night when lying flat, presented with a pale, numb left foot. **(A):** Subsequent DSA showed a 10cm complete occlusion of the distal SFA **(B):** The patient underwent balloon angioplasty followed by stent insertion over the site of occlusion **(C):** Completion angiography demonstrates re-expansion of the SFA occlusion with good distal flow.

Thoracic Aortic Aneurysm – Elective Repair



4 A.



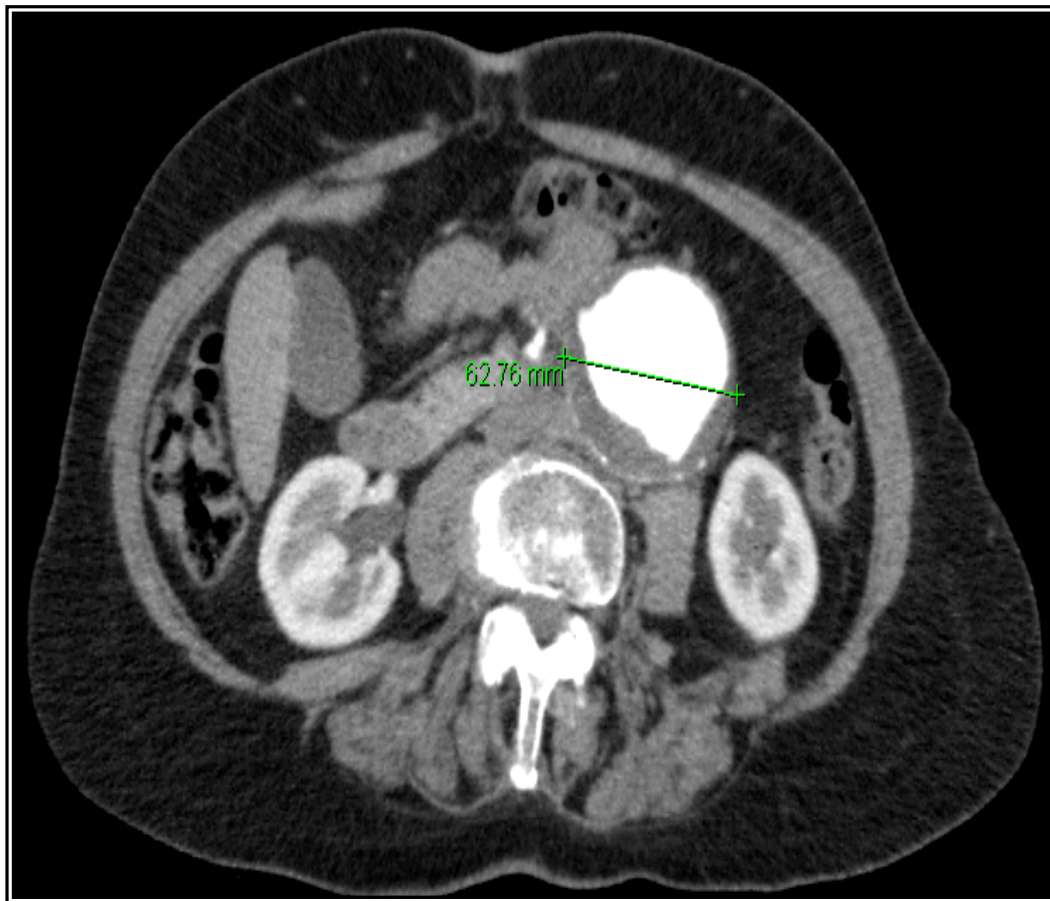
4B.



4C.

Figure 4. (A): CT thorax of a 62 year-old female with an incidental finding of a thoracic aortic aneurysm measuring 6.7 cm. **(B):** During an elective endovascular repair, a DSA demonstrates a saccular arch aneurysm distal to the left subclavian artery. **(C):** A thoracic endovascular stent was deployed and a completion angiography demonstrates good stent position with exclusion of the aneurysmal sac.

Abdominal Aortic Aneurysm – Elective Repair



5A.



5B.



5C.

Figure 5: (A): CT scan of a 67 year old man shows an infra renal abdominal aortic aneurysm measuring 6.3cm. (B): The patient underwent an elective endovascular abdominal aortic aneurysm repair. Contrast injection via the pigtail catheter within the aorta demonstrates the infra-renal aneurysm. (C): Post graft deployment angiogram shows good graft position and patency with no evidence of an endoleak into the aneurysm sac.

Abdominal Aortic Aneurysm – Urgent Repair For Acute Rupture



6A.



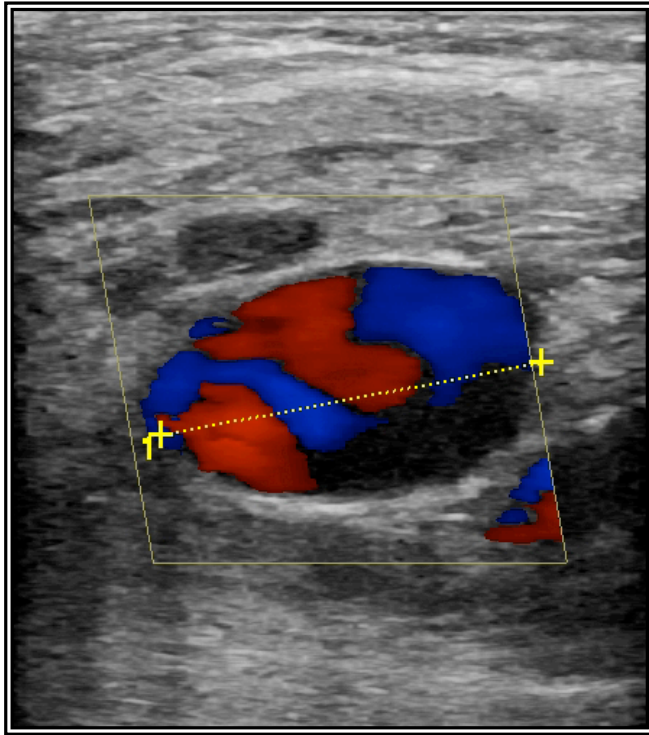
6B.



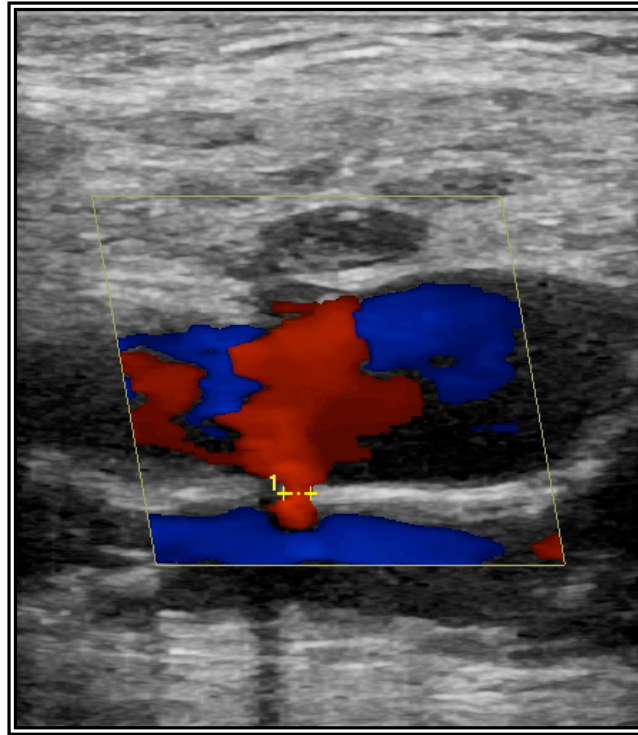
6C.

Figure 6: (A): Axial CT of a 70 year-old male with acute back pain and hypotension shows an infra-renal abdominal aortic aneurysm with contrast extravasation outside the aneurysmal sac – an aortic aneurysm rupture. (B): A 3D surface shaded CT reconstruction can be produced to help in the anatomical planning of the EVAR. (C): The patient successfully underwent an emergency EVAR and post stent deployment completion angiography demonstrates no evidence of persistent leak.

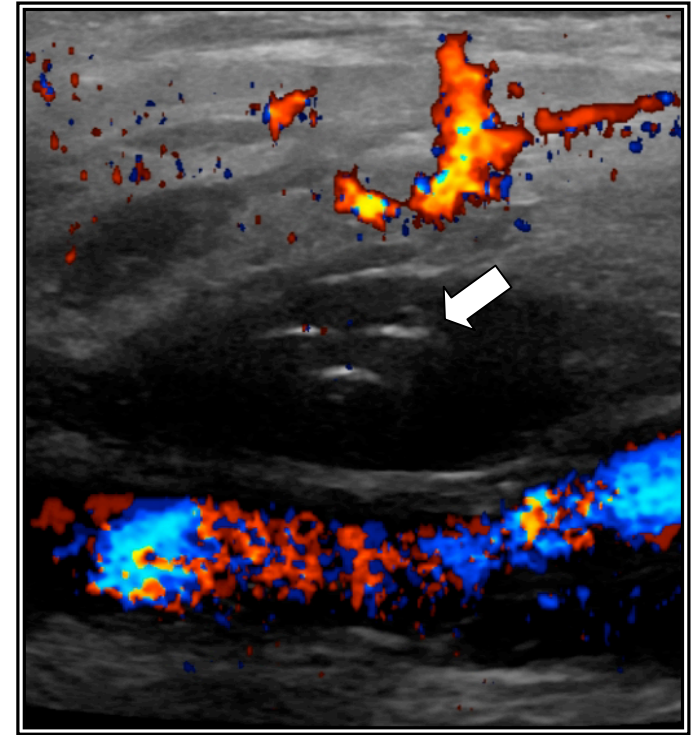
Pseudo-aneurysm Post-Angiogram



7A.



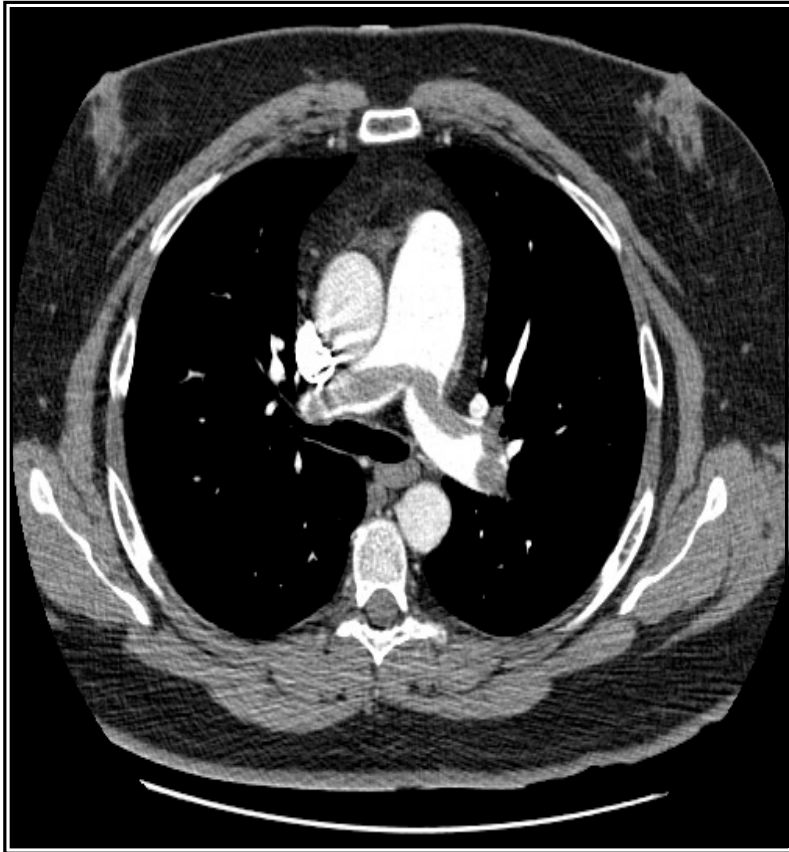
7B.



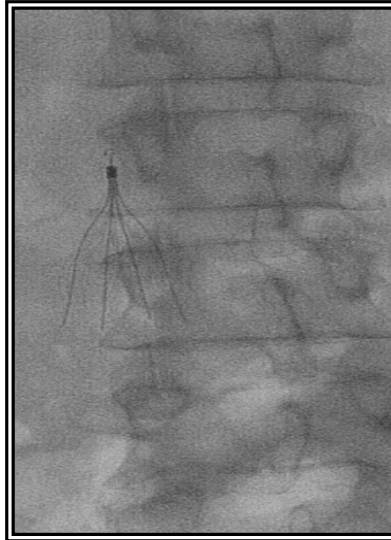
7C.

Figure 7: Ultrasound scan of an 82 year-old male who recently underwent a coronary angiogram and presented with extensive bruising and haematoma around the punctures site. **(A):** The duplex US demonstrates persistent blood flow within a cavity adjacent to the femoral artery puncture site consistent with a pseudo-aneurysm with a 5mm neck **(B)**. Under ultrasound guidance thrombin was injected into the aneurismal sac to promote haemostasis with no further arterial flow **(C)**.

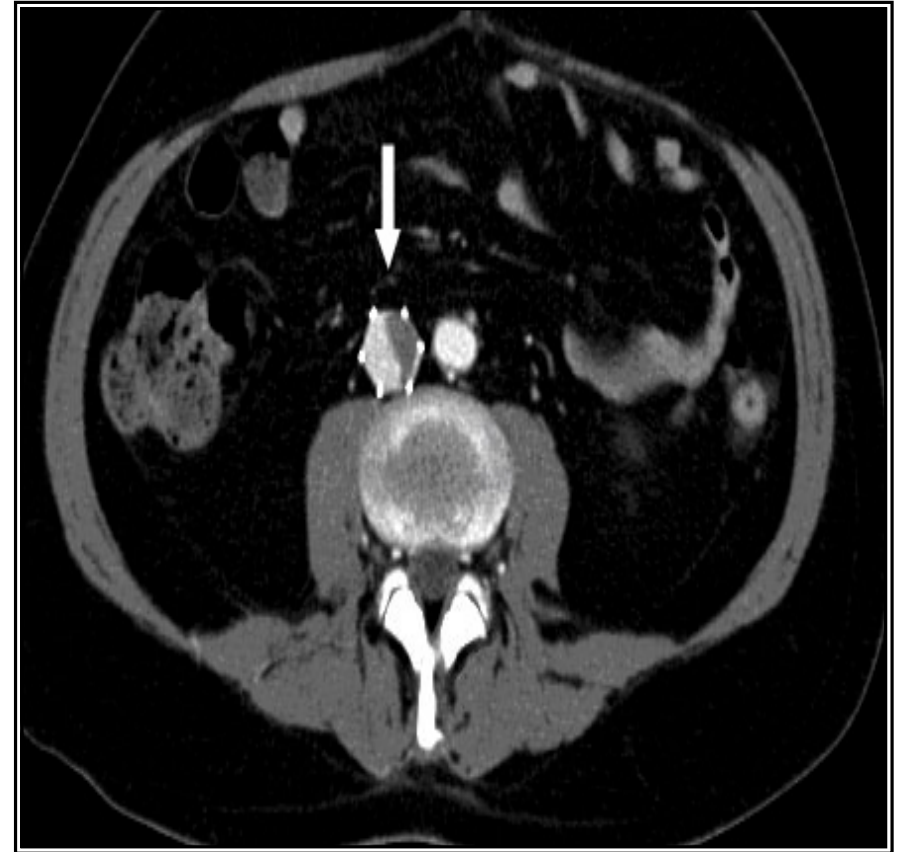
DVT Requiring IVC Filter



8A.



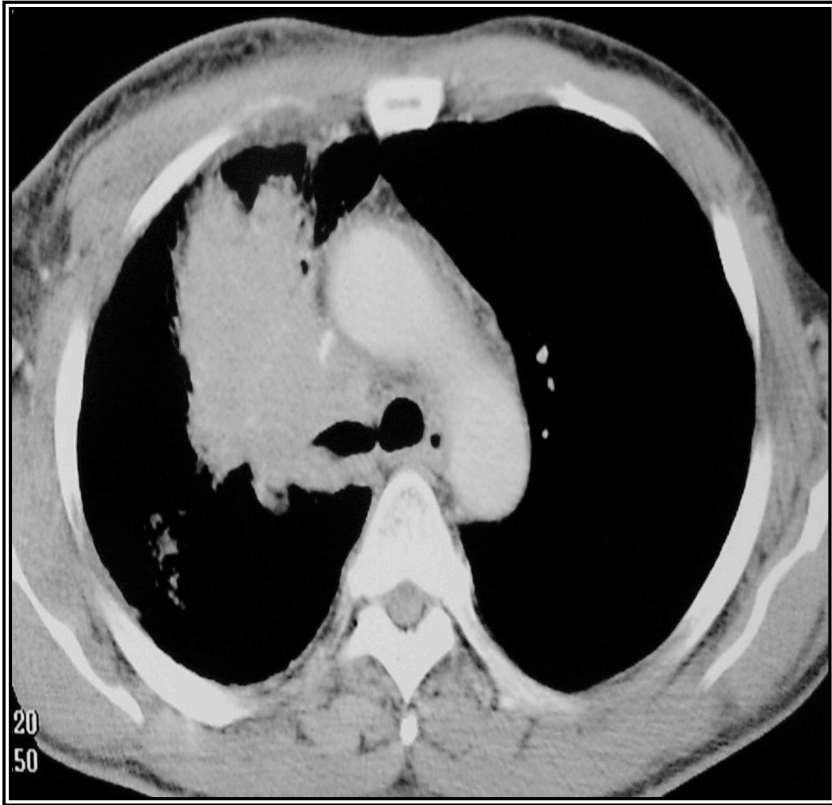
8B.



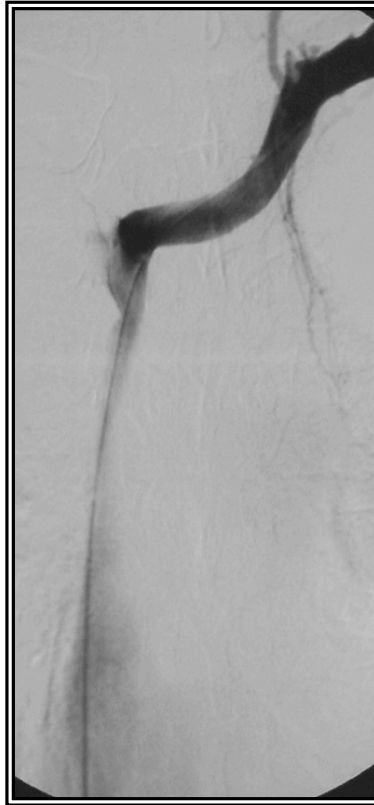
8D.

Figure 8: (A): CT scan of 52 year-old female with a history of breast cancer and recent haemorrhagic bleed from cerebral metastases presented with acute shortness of breath and hypoxia. The CTPA showed a large saddle pulmonary embolus but due to the recent cerebral haemorrhage there was a contraindication to anticoagulation. The patient underwent IVC filter placement (B). (D): Axial CT demonstrates good position of the spokes of the filter within the IVC containing a large thrombus.

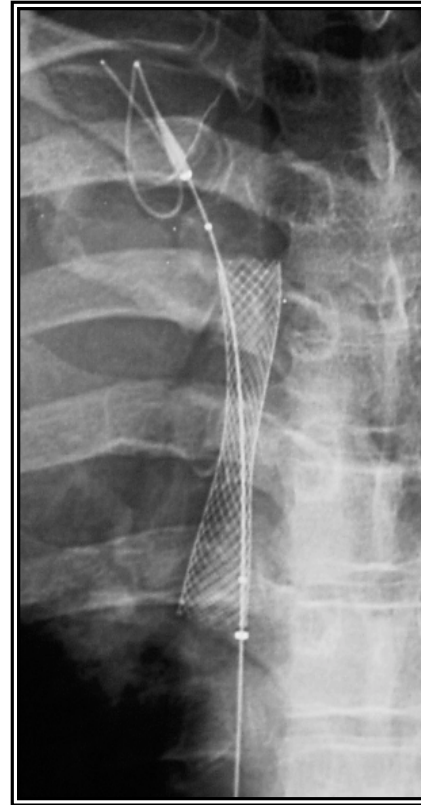
SVC Obstruction



9A.



9B.



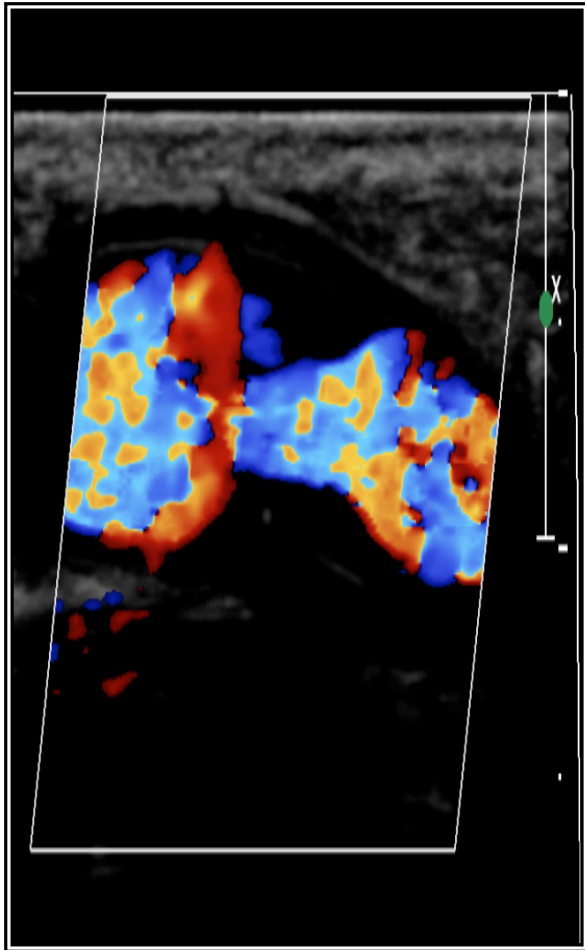
9C.



9D.

Figure 9: (A): CT thorax of a 52 year-old with a history of weight loss and haemoptysis presented with shortness of breath and dilated superficial chest veins. A large primary bronchogenic tumour compressing the SVC was noted. (B): Subsequent venography demonstrates significant compression of the SVC. (C): A stent was deployed across the site of external compression by the tumour to relieve the SVC obstruction. (D): Completion angiography demonstrates adequate stent placement with good distal flow.

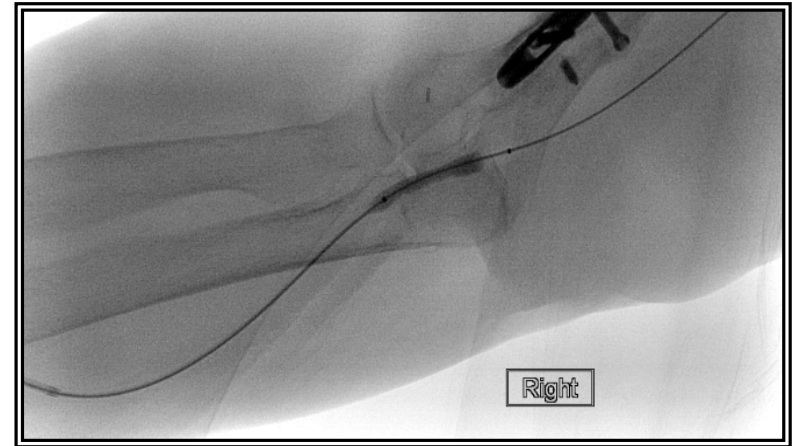
AV Fistula



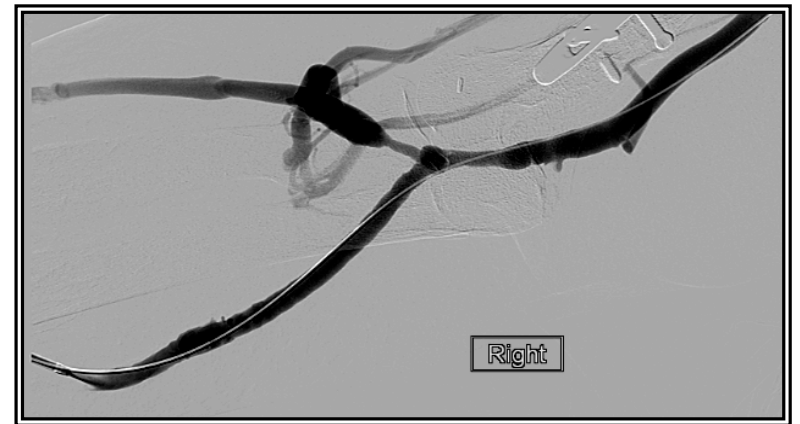
12A.



12B.



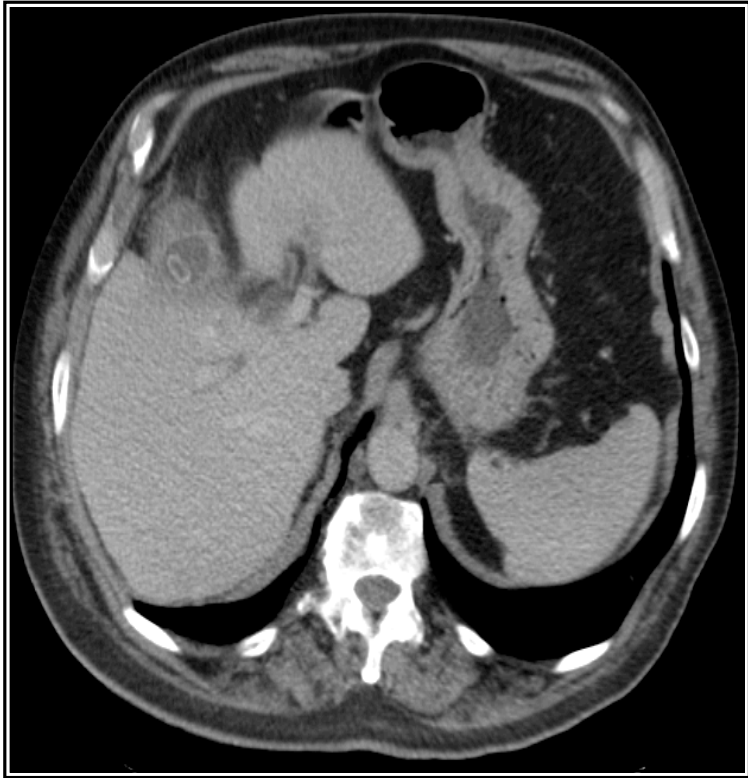
12C.



12D.

Figure 12: (A): Doppler US of an arterio-venous fistula in a 40 year-old with end stage renal failure from polycystic kidney disease on long term dialysis. The US demonstrates mid graft stenosis which is further seen on the DSA (B). The patient underwent an angioplasty with a 6mm balloon across the site of stenosis. (C): Subsequent completion angiography demonstrates good flow across the graft.

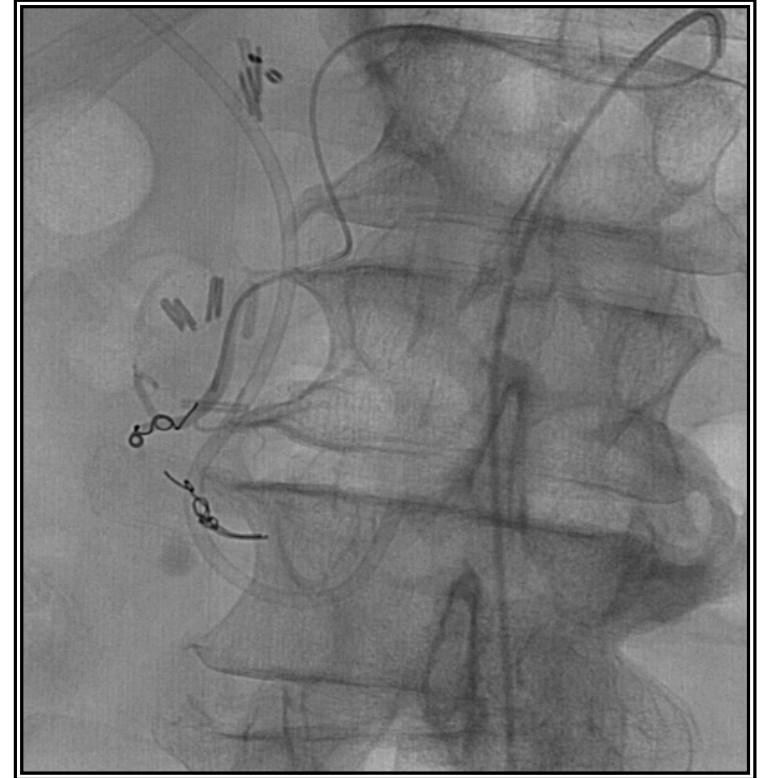
Upper GI Bleed



13A.

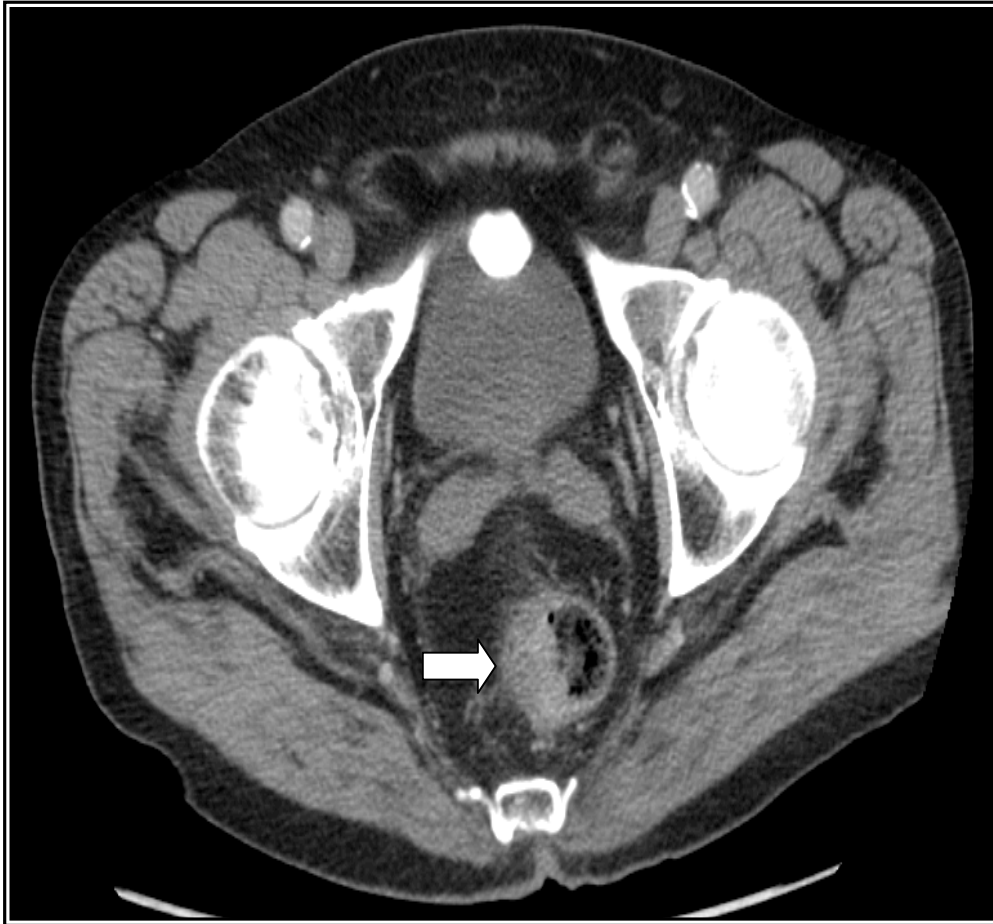


13B.

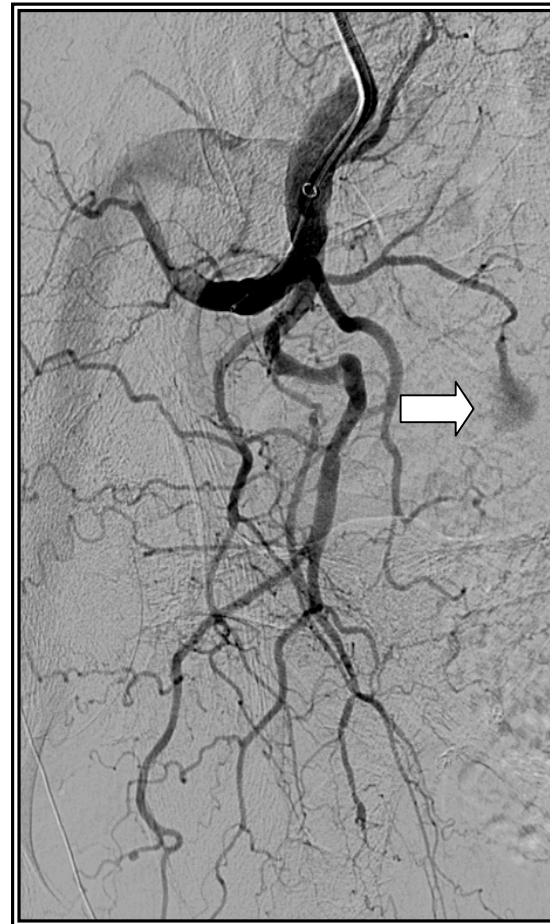


13C.

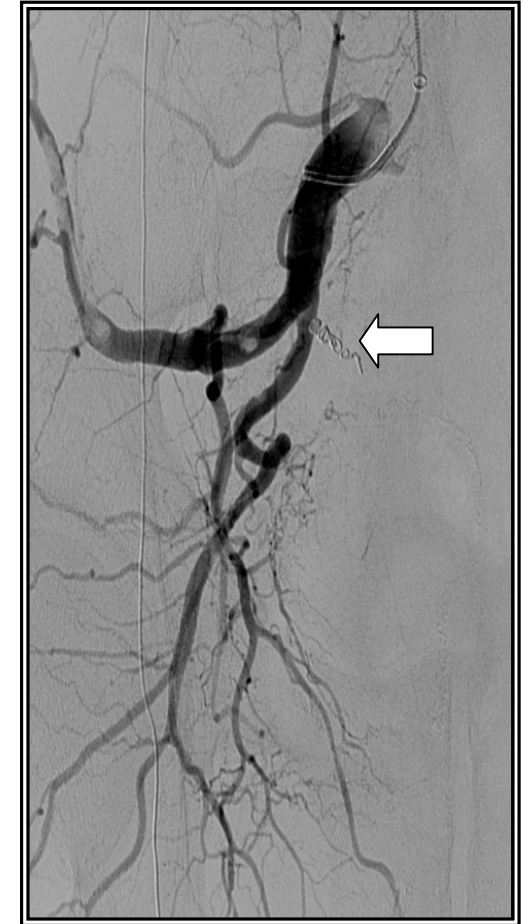
Figure 13: (A): An axial CT slice of a 40-year-old female with biliary sepsis caused by obstructed gallstones. Following an ERCP, the patient became hypotensive with malaena. (B): A selective superior mesenteric and coeliac angiogram was performed which showed contrast extravasation from the gastroduodenal artery and contrast pooling within a pseudo-aneurysm and bleeding into the duodenum. (C): Selective cannulation of the GDA via the coeliac axis was performed with deployment of coils proximal and distal to the bleeding point and the pseudo-aneurysm sac.



14A.



14B.



14C.

Figure14: (A): Axial CT of an 82 year-male with a known rectal tumour presented with fresh PR bleed. Arterial enhancement was seen within the rectal tumour with contrast seen within the rectal lumen suggesting an acute bleed. (B): A subsequent DSA demonstrates haemorrhage into the rectum from the inferior rectal artery (a branch of the internal iliac artery). (C): Embolisation coils were deployed into the feeding vessels and haemostasis was achieved.

Post-partum haemorrhage

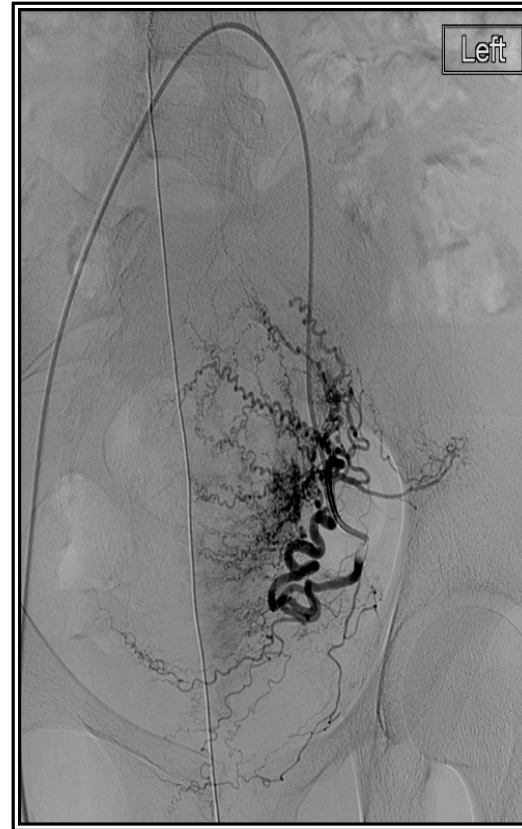
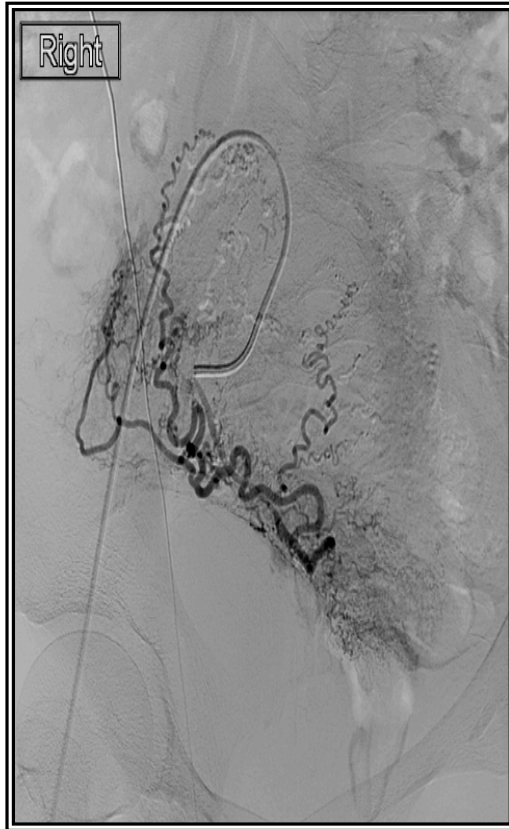
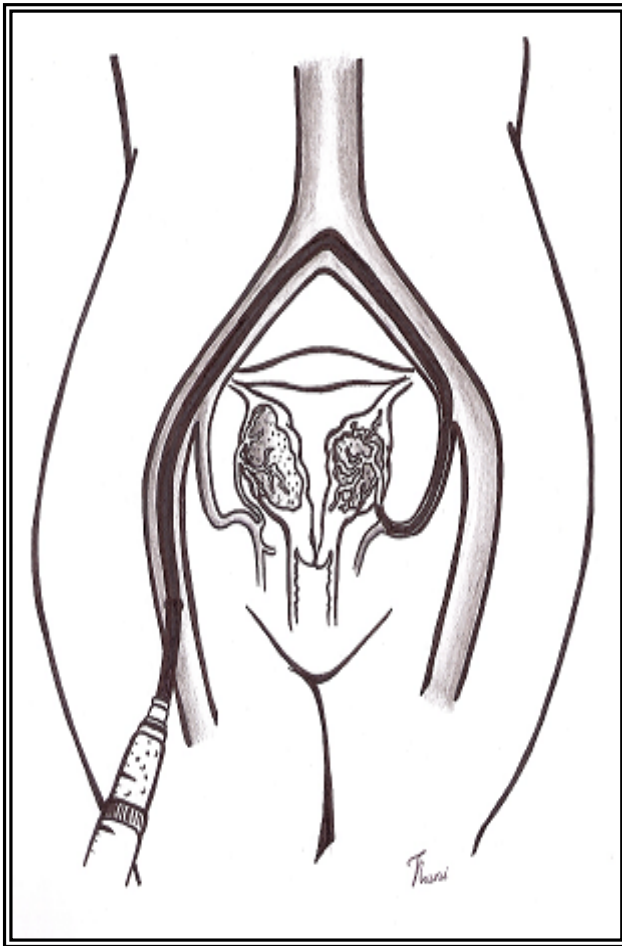
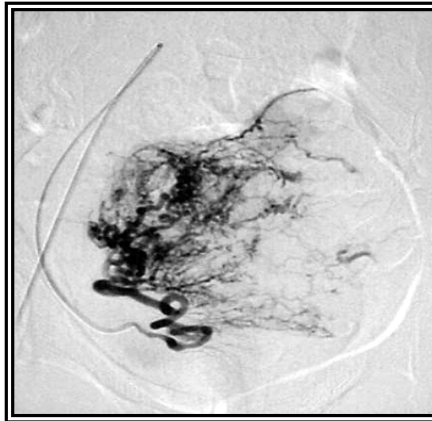


Figure 15: (A): 28 year-old female with placenta praevia (and possibly accrete) diagnosed on antenatal U/S underwent a planned elective C-section. Following delivery of the newborn, there was extensive bleeding during placental separation (>500mls) and an angiogram of both internal iliac arteries demonstrates prominent vasculature and haemorrhage from the site of placental implantation (A+C). Selective embolisation with Spongistan (haemostatic gelatin sponge) of the uterine arteries was performed. Post procedure angiogram (B+D) demonstrates reduced uterine artery flow reducing the risk of further post-partum haemorrhage.

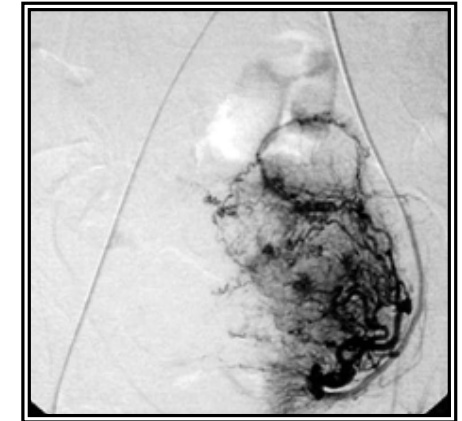
Fibroids



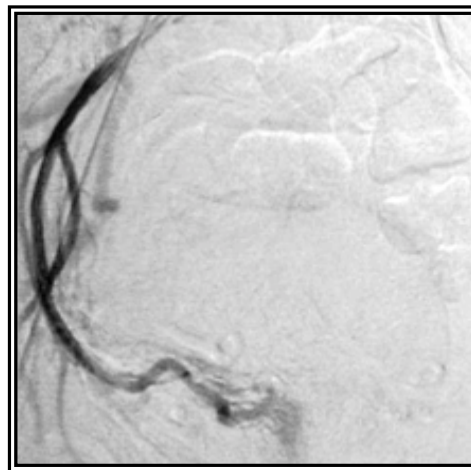
18A.



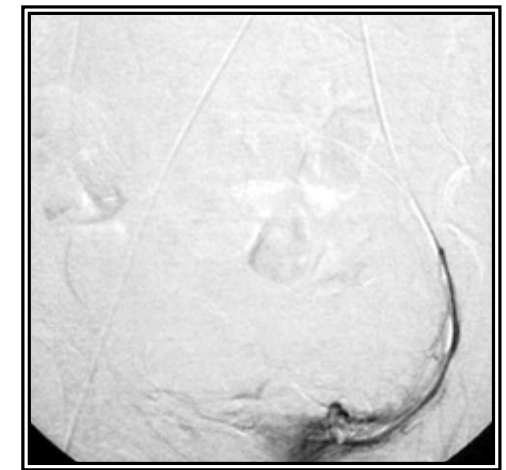
18B.



18C.



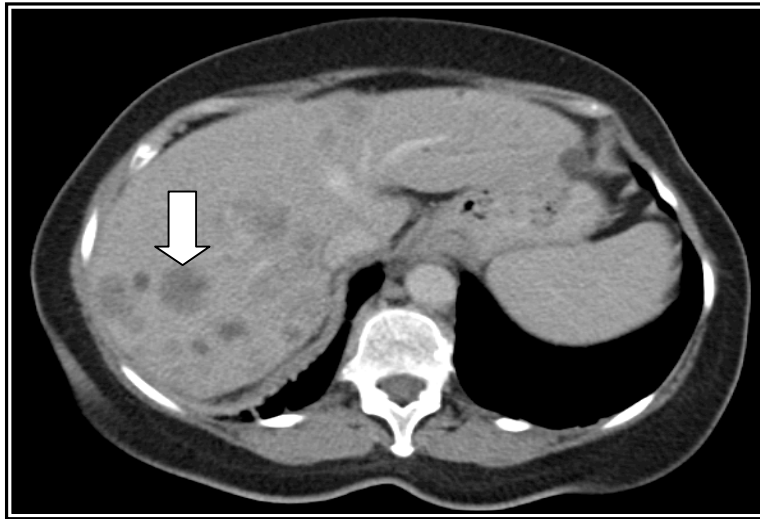
18D.



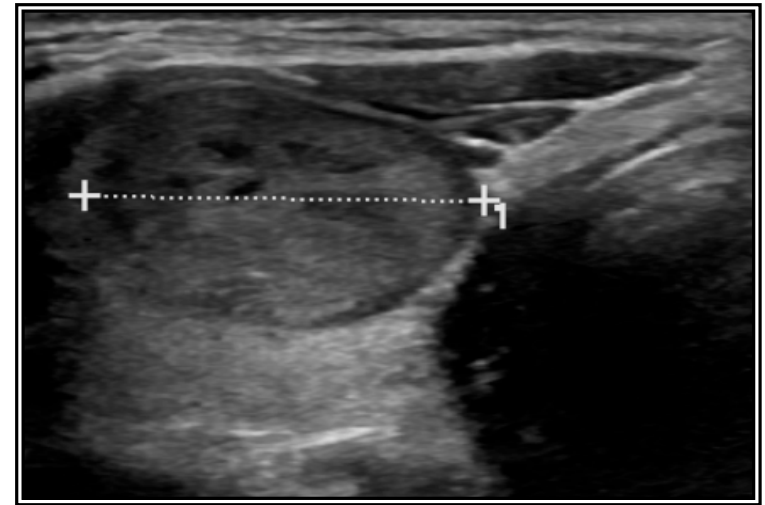
18E

Figure 18: (A): Diagram illustrating the injection of PVA particles used to embolise uterine fibroids. (B+C): A 42 year-old female with menorrhagia and dysmenorrhoea underwent a DSA which demonstrates extensive bilateral vascularity of the uterine fibroids. (D+E): Post embolisation with PVA particles shows reduced uterine artery perfusion with eventual reduction in the fibroid size.

U/S guided biopsies



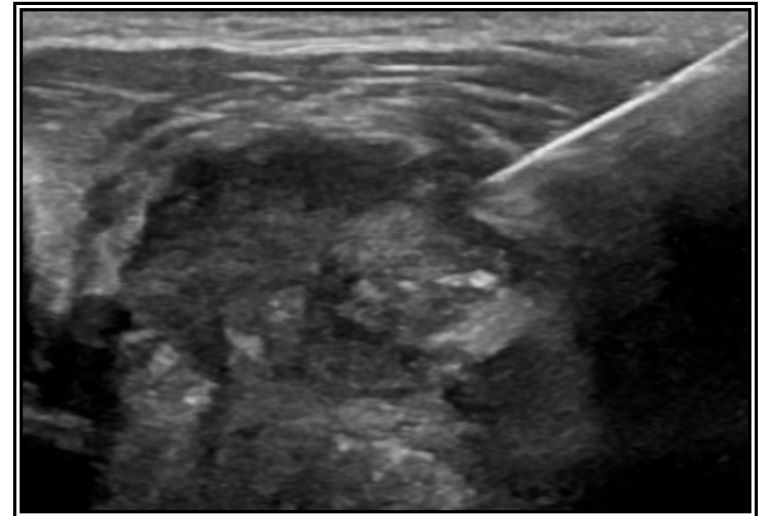
19A.



19C.



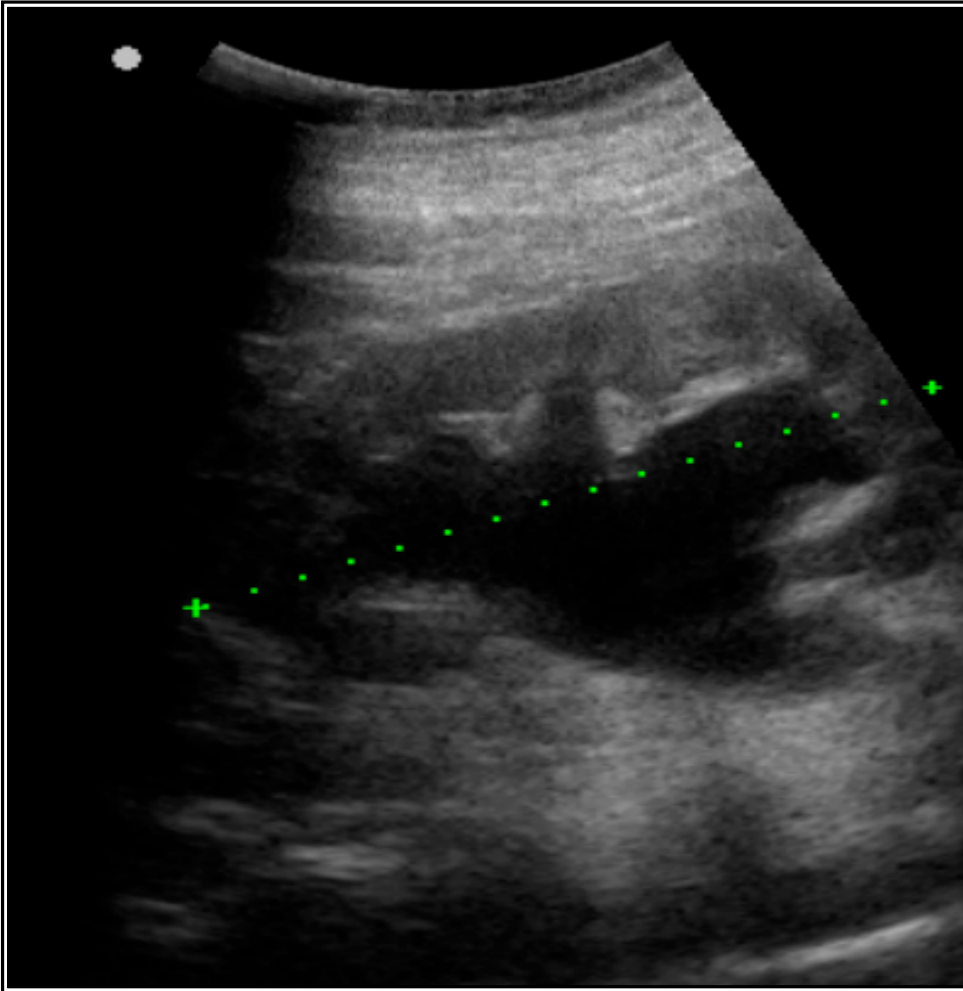
19B.



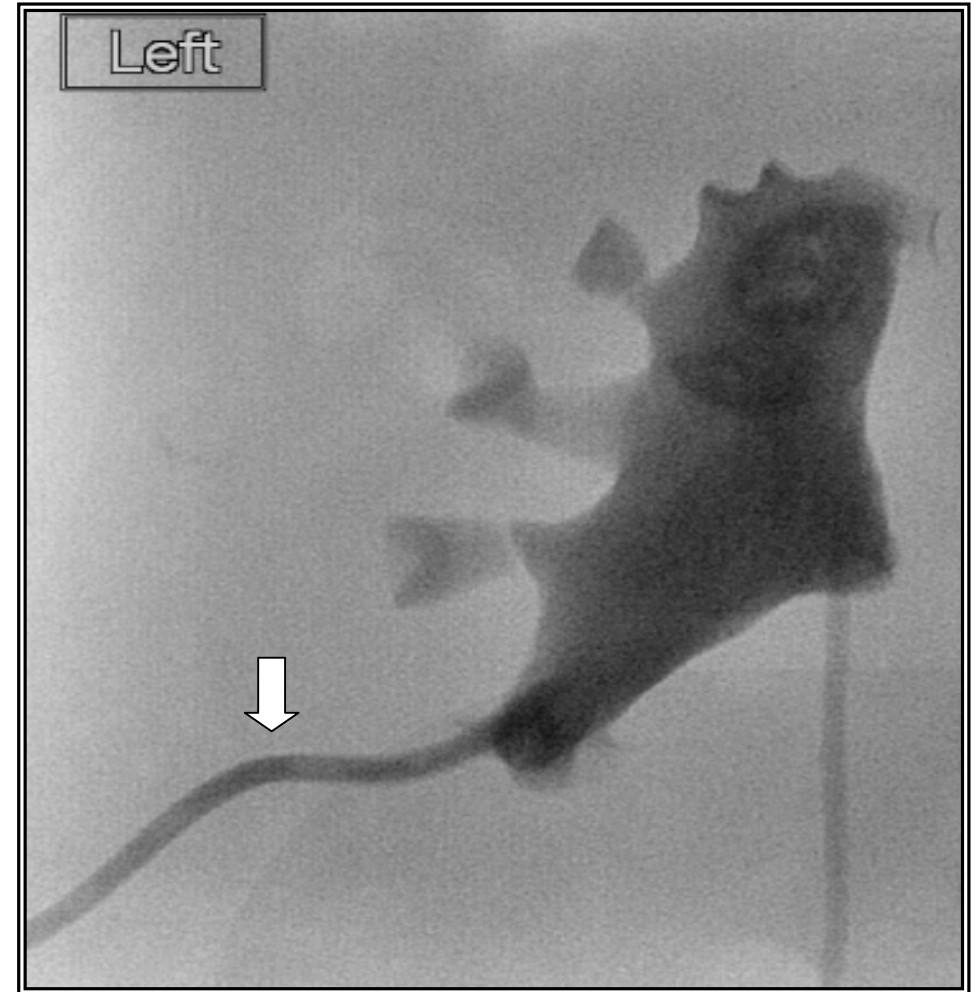
19D.

Figure 19: (A): Axial CT of an 82 year-old female with a history of weight loss and anaemia shows multiple liver metastases with an unknown primary. (B): Under US guidance, the patient underwent core biopsy for definitive histological diagnosis. (C): US scan of the right thyroid gland that demonstrates a solid solitary nodule. (D): US guided biopsy was undertaken to rule out a possible malignant thyroid tumour.

Obstructive Uropathy



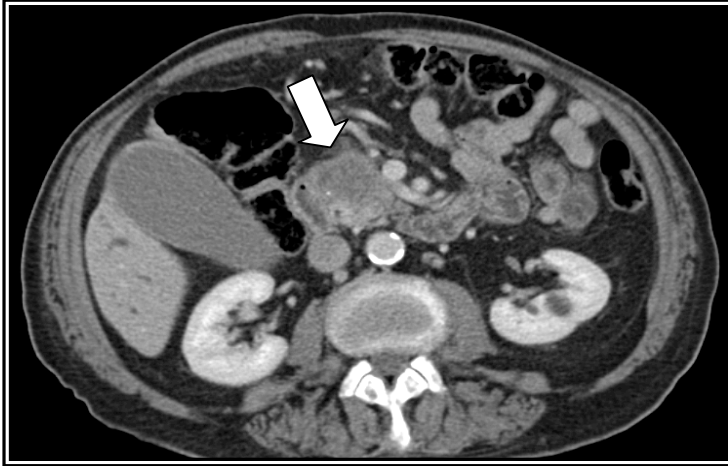
20A.



20B.

Figure 20: (A): US scan of a 50 year-old male with large right ureteric calculus causing obstruction and proximal pelvicalyceal dilatation. (B) A nephrostomy tube was inserted under US and fluoroscopic guidance to allow drainage of the obstructed kidney prior to stone retrieval.

Obstructive Jaundice



21A.



21B.



21C.



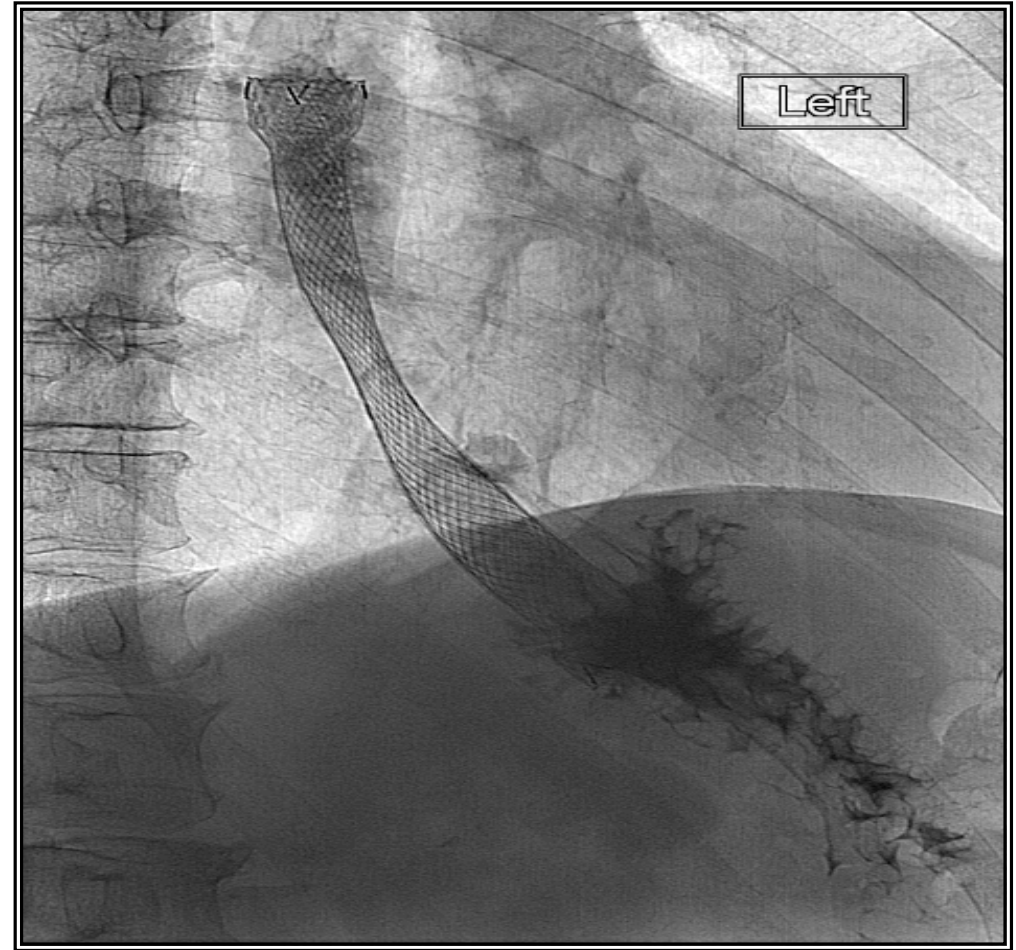
21D.

Figure 21: (A+B): Axial CT slices of a 73 year-old male with a history of jaundice and weight loss. The CT demonstrates pancreatic head malignancy causing obstructive jaundice and intra-hepatic duct dilatation. (C): The patient underwent ultrasound and fluoroscopic guided percutaneous trans-hepatic cholangiography, which shows obstruction at the distal end of the CBD at the level of the pancreatic head. (D): A stent was deployed across the site of obstruction to maintain patency and subsequent contrast injection shows distal flow into the duodenum.

Oesophageal Stricture



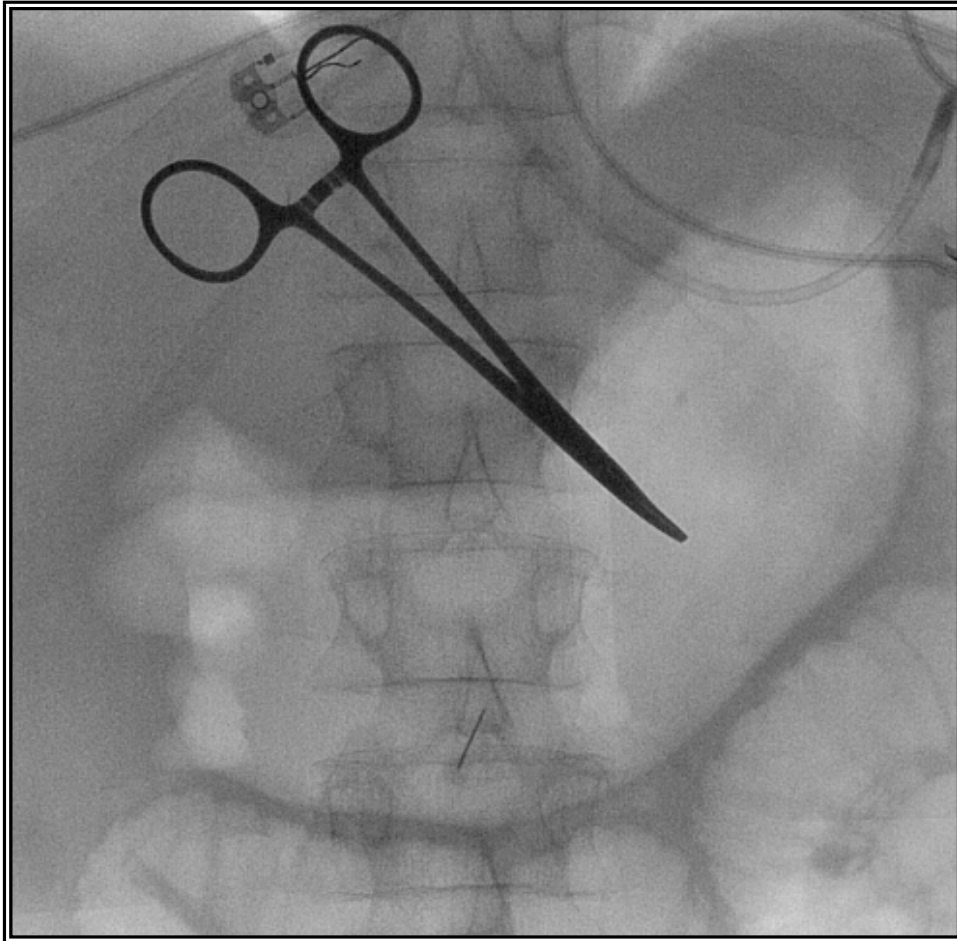
22A.



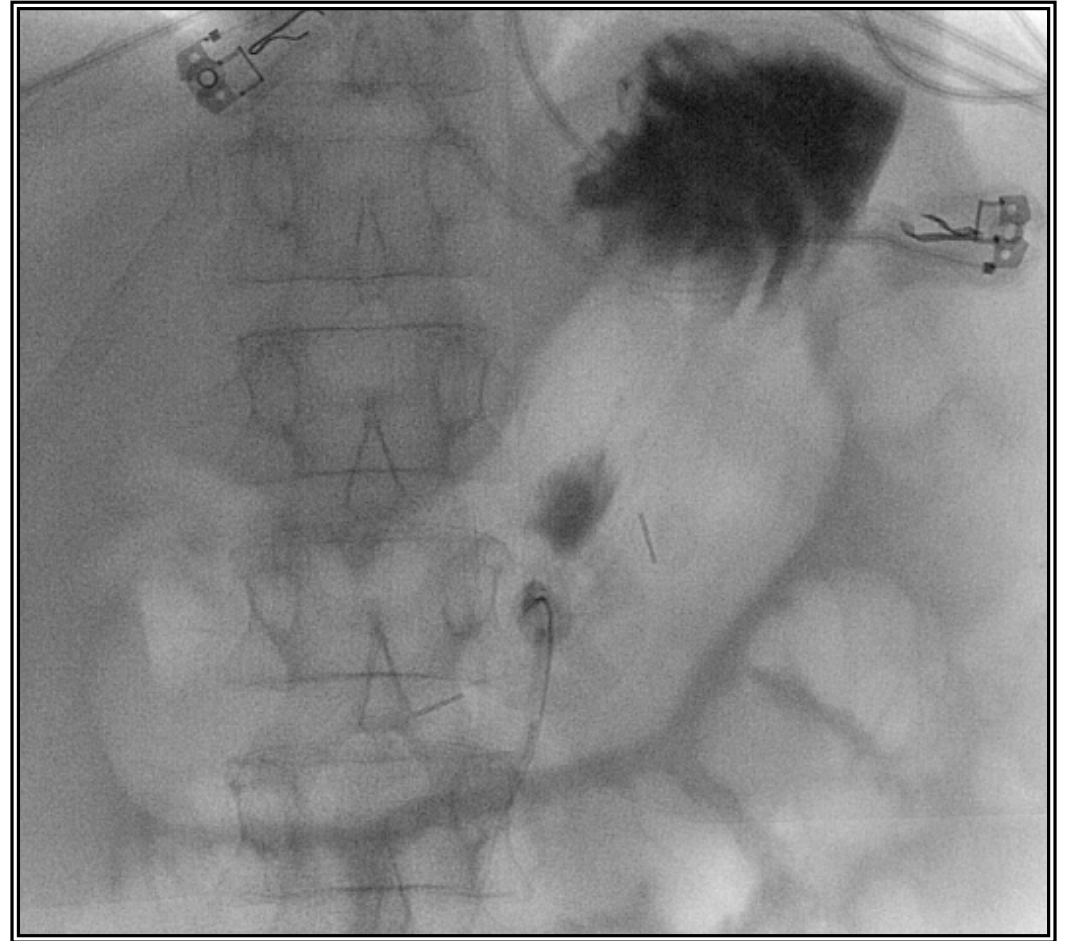
22B.

Figure 22: (A): Barium swallow of an 73 year-old male with dysphagia and weight loss demonstrates an apple core stricture consistent with an oesophageal carcinoma. (B): A palliative stent was deployed across the stricture to maintain patency and allow oral feeding.

Radiologically Inserted Gastrostomy (RIG)



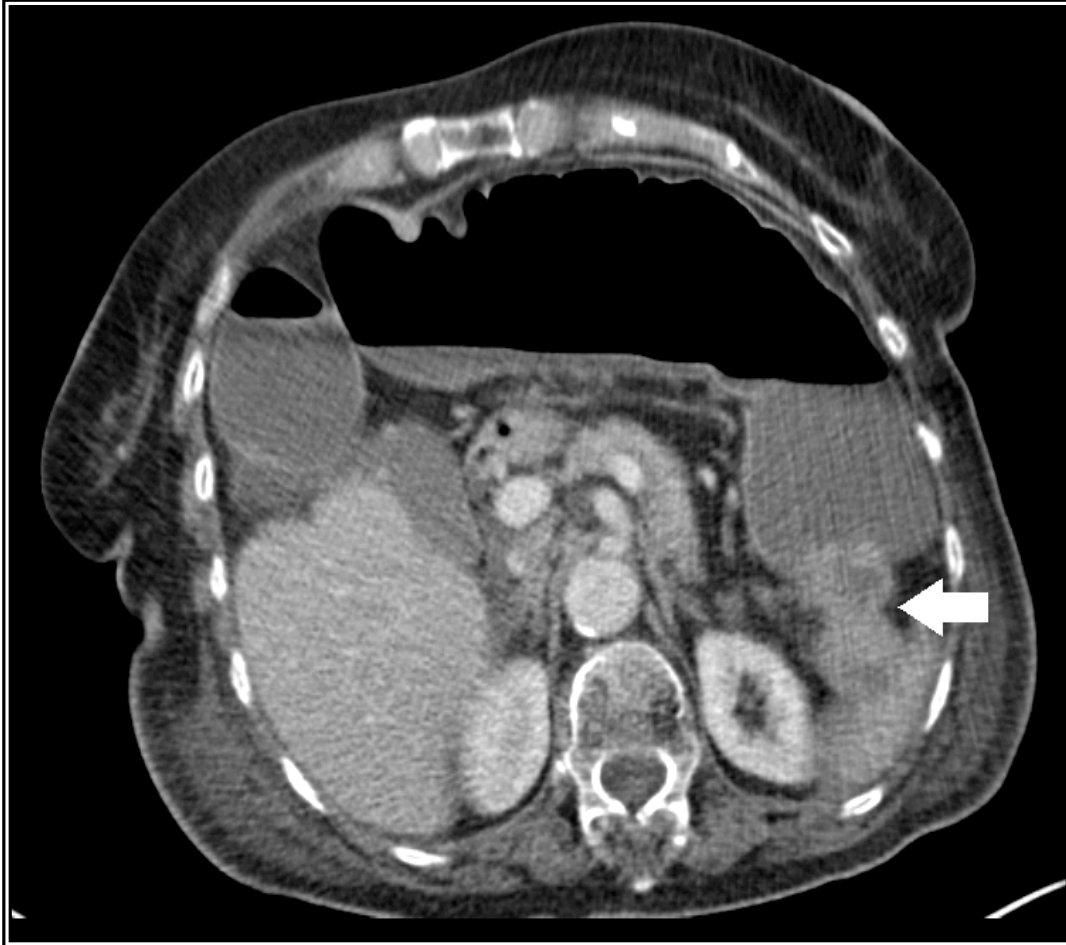
23A.



23B.

Figure 23: A 68 year-old stroke patient is unable to tolerate oral feeding having lost the swallow reflex with subsequent aspiration pneumonitis. The patient underwent gastrostomy insertion under fluoroscopy to allow direct enteral feeding into the stomach. **(A): The stomach is inflated with air and a pair of metallic scissors was used to mark the insertion site, with subsequent deployment of anchor sutures and gastrostomy button (B).**

Colonic Stricture

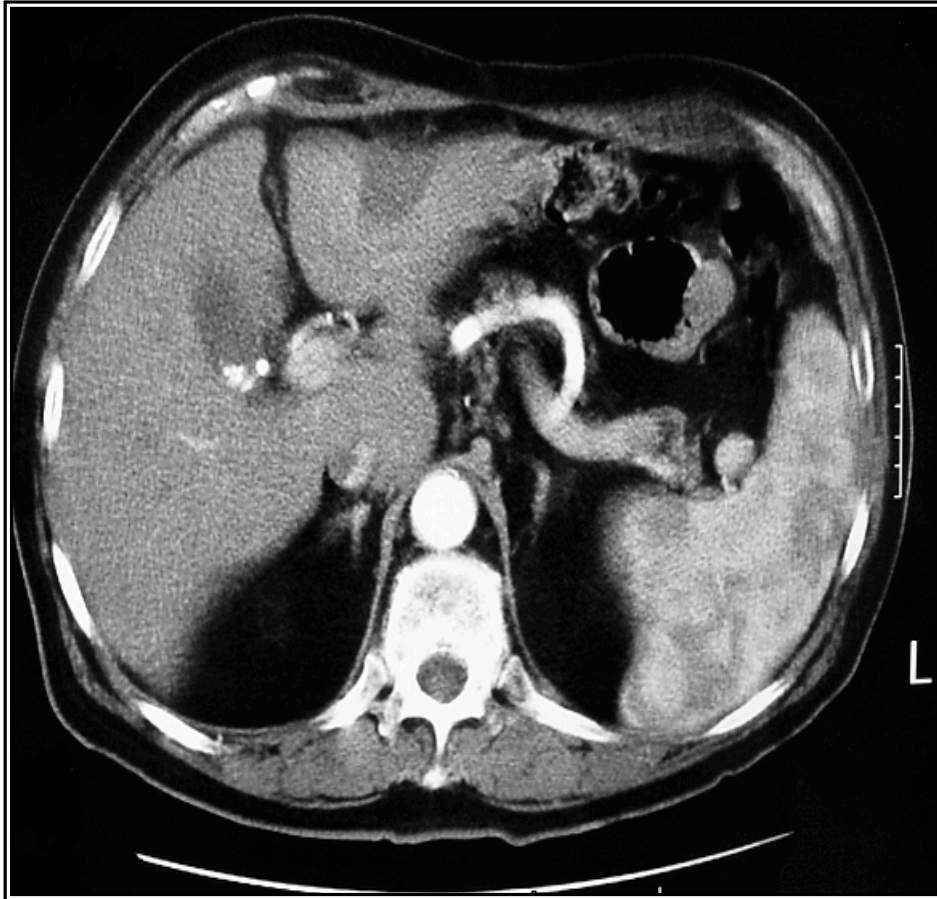


24A.

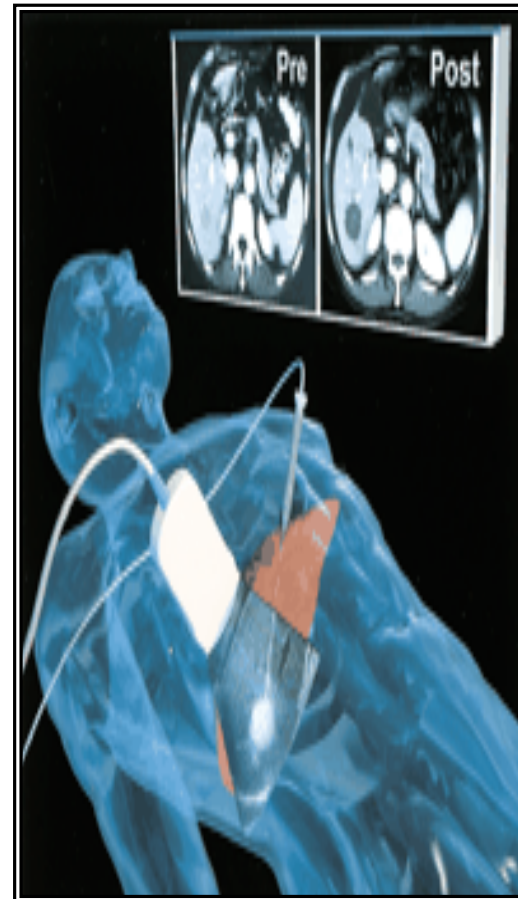


24B.

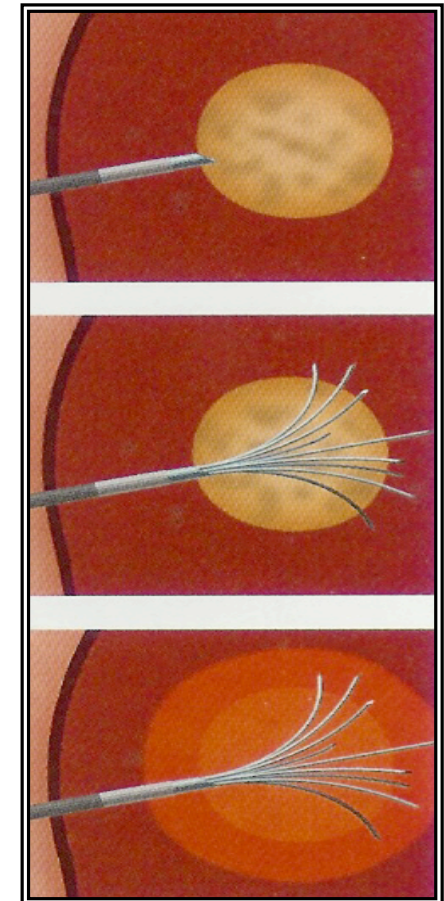
Figure 24: (A): Axial CT slice of a 52 year-old male with a history of weight loss and altered bowel habit presented to A&E with acute abdominal distension. Dilated loops of large bowel with a transition point at the level of the splenic flexure was detected due to a splenic flexure large bowel tumour. (B) The patient underwent colonic stent deployment under fluoroscopy across the stricture to maintain adequate patency.



26A.



26B.



26C.

Figure 1: (A): Axial CT slice of a 68 year-old male with rectal carcinoma and liver metastases. (B): The patient underwent US guided radiofrequency (RF) ablation of the liver metastases. (C): The diagram illustrates the placement of the RF probe within the tumour and the heat generated from the high frequency alternating current is used to cause necrosis and destruction of the tumour.