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EP07

CASE OF REFRACTORY AND RECURRENT RADIAL ANEURYSMAL BONE CYST TREATED WITH TRANS-ARTERIAL EMBOLISATION AND PERCUTANEOUS SCLEROTHERAPY – OUR EXPERIENCE

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Introduction:
Aneurysmal bone cyst is defined as benign expansile osteolytic locally aggressive bone lesion that typically affects more than 70% of adolescent with common location includes long bone metaphysis. The mainstay of treatment is complete intralesional curretage and excision however in cases of incomplete excision, there has been reported rate of recurrence up to 59%. Our case is to highlight the combined treatment of trans-arterial embolisation and percutaneous sclerotherapy in the case of recurrence and refractory aneurysmal bone cyst.

Case report:
22 y.o. lady previously presented in 2019 with pain and swelling of left wrist and subsequently diagnosed with distal left radius aneurysmal bone cyst. She had undergone curretage of left radius and right iliac bone graft in 2019 with second operation in 2020; whereby extended curretage and reconstruction with autologous bone graft from iliac crest was performed. Despite this, the lesion persistently increased in size with patient complaining persistent weakness and pain. She was then referred to us after opting for sclerotherapy treatment. Pre-treatment MRI was performed demonstrating increment in the size of the lesion with no evidence of sarcomatous change. Percutaneous sclerotherapy was performed using sclerosant foam containing sodium tetradecyl sulphate (STS) at three-monthly interval with improvement in clinical symptoms and follow-up radiograph demonstrating cortical mineralisation. However, the lesion demonstrate further increment in size post fifth sclerotherapy. She was then subjected with combined trans-arterial embolisation and percutaneous sclerotherapy. Pre-embolisation angiogram demonstrates multiple small abnormal feeding vessels arising from the radial artery that subsequently occluded using diluted polyvinyl alcohol (PVA) followed by percutaneous sclerotherapy using STS sclerosant foam. This patient is still currently on our ongoing follow up as well as monitoring of symptoms and radiographic improvement.

Conclusion:
Despite the challenge of treating recurrence and refractory aneurysmal bone cyst, we would like to present combined treatment of trans-arterial embolisation and percutaneous sclerotherapy as a treatment strategy.

EP08

ANGIOEMBOLISATION OF CREMASTERIC ARTERY FOR SCROTAL HAEMATOMA FOLLOWING HERNIAL REPAIR

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Introduction:
Left cremasteric artery is a branch of inferior epigastric artery and courses laterally deep into the fascia transversalis entering the cord deep to the internal spermatic fascia supplying the cremaster muscle and coverings of the cord. This course renders the artery to be prone for injury during procedure such as hernioplasty; one of the possible consequences is scrotal haematoma. We present a case of haemorrhage from unexpected cresmastric artery injury post-hernioplasty treated with angioembolisation. To the best of our knowledge, this has not been reported in literature.

Case Report:
A 66-year-old gentleman with left indirect inguinal hernia underwent a left inguinal hernioplasty in our institution with no immediate complications. However he presented to the emergency department the day after the procedure with complaints of rapidly worsening painful left scrotal swelling accompanied with symptoms of intestinal obstruction. Emergency laparotomy and re-do left hernioplasty was performed, revealing a strangulated inguinoscrotal hernia. Post-operatively, there was non-resolving scrotal swelling with a drop in the haemoglobin level; from 11.9g/dl to 8.5g/dl requiring packed cell transfusion. CT angiogram revealed active contrast extravasation from the left cremasteric artery. Angiographic run confirmed the finding and the left cresmatric artery was superselectively cannulated with a 1.9Fr microcatheter and embolization done with 0.5mm microcoil. Post-embolisation run showed resolution of active haemorrhage with preservation of proximal vessel. Ultrasound scan 24-hour post-procedure reproduced proximal vessel patency. Clinically there was a reduction of the left scrotal swelling and the haemoglobin remained stable.

Conclusion:
Iatrogenic scrotal haematoma may result from injury to the artery supplying the scrotum and/or testis. This artery is usually small in caliber and its identification is important for efficient and effective treatment. Angioembolisation is able to treat this injury with superior precision owing to its ability for localization and selective cannulation of the offending vessel.

EP09

EMBOLIZATION OF A HIGHLY VASCULAR CERVICAL SPINE TUMOUR AND IMAGING ASSESMENT PRIOR TO SURGERY

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Abstract:
Spinal metastases from advanced hepatocellular carcinoma (HCC) often manifested as bone pain, paraesthesia, or neurological deficit which then requires surgical resection of the tumour for better pain management and to avoid permanent neurological deficit. The pre-operative imaging of the tumour, particularly the vasculature needs to be properly assessed to avoid undesirable massive intra-operative bleeding. Embolisation of a highly vascular tumour prior to surgery is highly recommended and it is a known safe technique for better intra-operative haemostasis control. We presented a case report of an elderly male with advanced HCC with cervical spine metastases who presented with limb weakness and numbness. He underwent immediate surgical tumour resection however the surgery was abandoned due to massive blood loss of five thousand millilitres (mL). He was then referred to our interventional radiologists where he underwent total embolisation left vertebral artery, the major feeding artery of the tumour. The subsequent surgical resection was successful with significant reduction of intraoperative blood loss of eight hundred millilitres (mL). Imaging (CT brain) and clinical assessment post embolization showed no evidence of embolization – related complication, i.e., stroke.

EP10

PRE-OPERATIVE EMBOLIZATION OF ANGIOSARCOMA OF THE HEAD: A CASE REPORT

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Introduction:
Angiosarcoma of the head is one of the rarest soft tissue tumors of vascular endothelial origin in the pediatric population. This is a case report of a 1 year old male with angiosarcoma of the head and emphasizes the importance of multidisciplinary approach in its management, particularly pre-operative embolization by the interventional radiologist before surgical excision of the mass.

Case Report:
A 1-year-old male presented with a rapidly enlarging mass arising from the right parietooccipital region of his head since birth. Contrast MRI of the head showed a large encapsulated, soft tissue mass occupying the subgaleal layer of the right parietotemporooccipital region, measuring 14x10x14 cm (APxTxCC), which exhibits heterogeneous enhancement with areas of restricted diffusion. Patient was referred to interventional radiology for pre-operative embolization. Embolization using polyvinyl alcohol (PVA) and gelfoam was done which showed complete obliteration of the vessels supplying the tumor: superficial temporal, posterior auricular and occipital branches of the right external carotid arteries. Within 48 hours post-embolization, the patient then underwent wide excision of the mass with only 250 cc blood loss and 3 hours operating time. Histopathology of the mass yielded angiosarcoma. Angiosarcoma is a very aggressive tumor and its management is complex which needs a multidisciplinary approach. Local tumor control is the primary goal of treatment with wide excision of the mass done in most cases. The main goal of pre-operative embolization is to devascularize the tumor prior to surgical resection which results to lower intraoperative blood loss and post-operative blood transfusion requirement. Adjuvant chemotherapy and radiation therapy may be recommended for extensive lesions with established metastases.

Conclusion:
Pre-operative embolization for angiosarcoma is essential prior to surgery since it reduces intra-operative blood loss and the need for postoperative blood transfusion. It should be considered for resections of highly vascular tumors such as angiosarcoma.

EP11

PSEUDOMYXOMA PERITONEI MIMICKING RUPTURED LIVER ARTERIOVENOUS MALFORMATION – AN UNCOMMON PRESENTATION OF A HIGH GRADE LIVER SARCOMA

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Introduction:
Pseudomyxoma peritonei is characterized by accumulation of mucinous ascites within the peritoneal cavity and it is commonly associated with an underlying mucinous carcinoma. Scalloping of the liver margin is common but it is very uncommon to cause abnormal liver angiogenesis. This case report is to highlight the unusual presentation of pseudomyxoma peritonei in a case of high-grade liver sarcoma, mimicking ruptured arterio-venous malformation(AVM).

Case report:
A 44-year-old gentleman presented to the emergency department with 1-month history of anemia and abdominal discomfort. Examination revealed a cachexic patient with a distended abdomen and right hypochondriac tenderness. Initial multiphase CT Liver showed multiloculated low attenuation fluid in peritoneal cavity with scalloping of segment VII liver surface along with a feeder vessel from right posterior segmental hepatic artery. Angiography confirmed the feeder vessel arising from segment VI and VII with active blush suggestive of acute bleed. The initial impression was ruptured liver arteriovenous malformation or ruptured liver tumor with hemoperitoneum. Selective angioembolization of right segmental hepatic artery was done with Polyvinyl alcohol. Patient was then discharged well. Repeated CT liver a month later revealed enlarging perihepatic soft tissue mass with complex vascular structures. Repeated angiogram showed more prominent serpiginous vessel with a pseudoaneurysm outside the liver parenchyma despite previous angioembolization. Pre-op embolization was performed using 30% Histoacryl. Wide local segment VI and VII liver resection was performed, and large amount of mucinous material evacuated. Histopathological examination revealed a high grade sarcoma.

Conclusion:
This is a rare case of high grade liver sarcoma with pseudomyxoma peritonei, which was initially mistaken as a ruptured liver AVM. Pseudomyxoma peritonei are usually hypovascular. In the presence of abnormal vessels and close proximity with the liver, a ruptured high grade liver sarcoma with pseudomyxoma peritonei should be considered.

EP12

RUPTURED CYSTIC ARTERY PSEUDOANEURYSM AS A COMPLICATION OF ACUTE CALCULOUS CHOLECYSTITIS – A CASE REPORT

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Introduction:
Cystic Artery Pseudoaneurysm is an extremely rare entity. The majority of cases were reported as post-operative complication of laparoscopic cholecystectomy, however there are also a few cases associated with acute cholecystitis or pancreatitis. Patients with Cystic Artery Pseudoaneurysm may be asymptomatic or present with hemobilia with the clinical triad of jaundice, upper abdominal pain and obscure upper gastrointestinal bleeding knows as "Quincke's triad". Rarely, it may also present with a torrential, life threatening gastrointestinal haemorrhage.

Case Report:
We report a case of a 60-year-old man with underlying Ischaemic Heart Disease and Bronchial Asthma who presented with sudden onset severe epigastric pain, melaena and haematemesis. With the suspicion of an upper gastrointestinal bleed due to perforated gastric or duodenal ulcer, the patient underwent an emergency Oesophagogastroduodenoscopy (OGDS) which showed haemobilia however the source of bleeding could not be identified. An emergency multiphase Computed Tomography confirmed a ruptured cystic artery pseudoaneurysm with concurrent acute calculous cholecystitis. The pseudoaneurysm was subsequently managed via endovascular intervention and an elective laparoscopic cholecystectomy 2 weeks later. The patient made an uneventful recovery and was seen well in clinic 2 months later.

Conclusion:
Cystic artery pseudoaneurysm is very rare, nonetheless it should be considered in patients presenting with symptoms of upper gastrointestinal bleed. It has previously mainly been treated by open cholecystectomy plus ligation of the cystic artery. However, there has been increasing reports in literature proposing various other treatment strategies including radiological selective embolization and coiling as well as a two-step approach involving radiological management of the pseudoaneurysm followed by an elective cholecystectomy. Furthermore, these endovascular options could help to reduce the risks and morbidity associated with open surgery in high-risk patients such as in our case.