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A RARE CASE OF POST MVA CERVICAL LIGAMENTOUS TEAR COMPLICATED WITH VERTEBRAL ARTERIOVENOUS FISTULA (VAVF) WITH SUCCESSFUL ENDOVASCULAR TREATMENT

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Introduction:

Vertebral arteriovenous fistula (vAVF) post Motor Vehicle Accident (MVA) is a rare condition caused by abnormal communication between the vertebral artery with the adjacent veins. In post MVA setting, it is commonly associated with vertebral body fracture particularly, the foramen transversarium.

Case Report:

We report a case of a 19 year old girl who presented with complete C2/C3 anterior and posterior ligament tear post MVA. CT angiogram (CTA) gave a suspicion of pseudoaneurysm at right posterior C3 vertebral body causing mass effect to spinal cord. MRI showed traumatic AVF at C2/C3 level involving the V2/V3 right vertebral artery to the vertebral venous plexus. Digital Substraction Angiography (DSA) revealed a transected right vertebral artery at C2/C3 level with arteriovenous fistula and enlarged vertebral venous plexus. The fistulous communication was successfully occluded from cranial and caudal approach to the transected segment right vertebral artery with a total of 8 coils.

Conclusion:

In conclusion, post MVA vertebral arteriovenous fistula (vAVF) is a rare sequelae of ligamentous and vertebral bony at the cervical region. Endovascular treatment with ipsilateral vertebral artery closure is a feasible treatment of vAVF.

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SIGNIFICANTLY LESS BLEEDING INTRAOPERATIVELY WITH FAVORABLE POST-SURGICAL OUTCOMES FOLLOWING ENDOVASCULAR COILING AND AMPLATZER VASCULAR PLUG FOR AURICULAR ARTERIO-VENOUS MALFORMATION

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Introduction:

Arterio-venous malformation (AVM) is characterized by an anomalous connection of arterial and veins that bypass the capillary vessels. Although auricular was cited as the second most prevalent location for vascular malformations in the head and neck, the incidence was rather rare. This region and its naturally high-flowing characteristic can be devastating and have a detrimental effect on the quality of life.

Case Report:

A 20-year-old male was admitted to the emergency department for pain and left ear enlargement with a palpable and pulsating mass within his left auricle. Ultrasound and contrast-enhanced Multi-Slice Computed Tomography (MSCT) scans were performed for suspicion of vascular malformation. The patient was diagnosed with AVM Schobinger Stage II-growing progressively. Angiography revealed the feeding artery from the auricular artery, branches of the External Carotid Artery (ECA), and draining vein in the Left Jugular vein which matched the Yakes and Baumgartner type IIIa. Several attempts on Endovascular coiling were utilized in ECA branches but resulted in insignificantly reduce of the flow. A successful blockade of the ECA was yielded by the placement of an Amplatzer Vascular Plug at the distal end of the ECA. Subsequently, multiple reconstructive surgeries were performed, with a total reported blood loss of 50 cc during the initial mass-excision operation, without any complications nor complaints about hearing function, and with a satisfactory result.

Conclusion:

An efficacious endovascular approach as the treatment of Auricular Arterio-Venous Malformation (AVM) using coiling and Amplatzer vascular-plug deployed at the distal end of ECA to occlude the shunt and the abnormal high-flow malformation was described. This procedure resulted in significantly reduced intraoperative bleeding with a favorable outcome.

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POSTERIOR TRANSGLUTEAL CT FLUOROSCOPY GUIDED PERCUTANEOUS DRAINAGE OF DEEP PELVIC ABSCESS IN SULTAN HAJI AHMAD SHAH MEDICAL CENTRE @IIUM (SASMEC @IIUM): A CASE SERIES

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Abstract:

Deep pelvic abscesses in many instances are very challenging to treat surgically. Presence of many structures within the tight pelvic cavity make surgical intervention very difficult and risky. Posterior transgluteal CT fluoroscopy guided percutaneous drainage of these abscesses is much safer and amendable for treatment. Although technically straightforward, good pelvic cavity anatomical knowledge and axial CT image interpretation skill is detrimental to achieve satisfactory results. We review five (5) cases of posterior transgluteal CT fluoroscopy guided percutaneous drainage of deep pelvic abscess performed in our center within these past 2 years with good outcome.

PERCUTANEOUS TRANSHEPATIC BILIARY DRAINAGE IN ADULT BILIARY ATRESIA WITH NATIVE LIVER: A CASE SERIES

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Abstract:

Patients with biliary atresia (BA) require Kasai portoenterostomy (KP) during infancy to improve biliary flow. Following KP, patients commonly develop biliary complications, such as jaundice, recurrent cholangitis, biliary stricture, and multiple cystic intrahepatic dilatations, which will further lead to biliary cirrhosis and liver failure that requires liver transplantation. Percutaneous transhepatic biliary drainage (PTBD) can be performed to treat biliary complications in post KP biliary atresia patients. However, PTBD is technically challenging due to biliary strictures and intrahepatic bile duct dilatation, and its effectiveness remains controversial. Therefore, we described two cases of successful percutaneous transhepatic biliary intervention with a novel technique after KP in adult KP patients with native liver. Following the procedure, both patients achieved short-term and long-term clinical improvement. We observed that cholangitis resolved, and liver enzymes remained normal. Interval hepatobiliary ultrasound did not show biliary dilatation or liver cirrhosis. Both patients are not on the liver transplantation list. To our knowledge, this is the first successful demonstration of the novel technique in percutaneous biliary intervention in adult BA patient status post KP.

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MAY-THURNER SYNDROME CONUNDRUM: MASSIVE SUBCAPSULAR LIVER HEMATOMA FOLLOWING INTRAVENOUS THROMBOLYSIS FOR DEEP VEIN THROMBOSIS

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Introduction:

May-Thurner Syndrome (MTS) is caused by compression of the left common iliac vein by overlying right common iliac artery against the spine resulting in varicosities, deep venous thrombosis (DVT), chronic venous stasis ulcers or pulmonary embolism. MTS is rare, accounts for only 2% to 5% of all patients presenting with DVT. In our case, the patient had unprovoked long segment left iliofemoral DVT. She developed huge subcapsular liver hematoma, upon receiving thrombolytic drugs which is a rare complication of anticoagulant therapy (incidence of 1%).

Case Report:

A 46-year-old female with no comorbid, presented with left lower limb swelling and pain for two weeks. Ultrasound Doppler demonstrated long segment left lower limb DVT from left popliteal into left external iliac veins. Anticoagulant was initiated and Computed Tomography (CT) scan abdomen was done which confirmed the diagnosis of MTS. Catheter directed left femoral and iliac vein thrombolysis, thrombectomy, stenting and venoplasty was performed. Post procedure, patient developed shortness of breath, severe abdominal pain and drop in haemoglobin (12 to 7 g/dL). CT scan showed huge subcapsular liver hematoma, measuring 15.5cm and 20.0cm in diameter and height respectively. The anticoagulant therapy was ceased and patient was transfused. Ultrasound guided drainage of liver hematoma was done for symptomatic relief.

Conclusion:

MTS can lead to serious consequences in healthy adult; in our case long segment DVT. MTS is not only uncommon to diagnose, but also challenging in treatment. In this case, the anticoagulant therapy caused spontaneous huge subcapsular liver hematoma in turn, requiring further intervention.

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FIRST SUCCESSFUL TRANSCHOLECYSTO-CYSTIC DUCT COMMON BILE DUCT STENTING IN A CASE OF MALIGNANT OBSTRUCTIVE JAUNDICE

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Abstract:

Malignant obstructive jaundice is a disease that leads to multiple pathological conditions that could negatively affect patient outcome. Majority of the time, it can be treated with either Endoscopic Retrograde Cholangiopancreatography (ERCP) and Percutaneous Transhepatic Biliary drainage (PTBD) with success rate up to 100%. In recent years, endoscopic ultrasound guided biliary drainage (EUS-BD) has start to takeover the role of PTBD in cases where ERCP failed. It has shown to be safer with similar success rate. However, it does require the procedure to be done in a highly specialized center where the expertise is available. We here present a case report where CBD stenting is done through passage of cholecystotomy-cystic duct. A-53-year old female presented to our center with features of obstructive jaundice. CT scan revealed uncinate tumor with minimally dilated common bile duct (CBD) and intra-hepatic duct (IHD). Multiple attempts of ERCP and PTBD failed due to difficult cannulation and inadequate dilation of IHD. Furthermore, EUS-BD expertise was not available in our center. A percutaneous cholecystostomy was performed for temporary biliary decompression. After multidisciplinary discussion was made, decision was made for trans-cholecysto-cystic duct CBD stenting. The procedure was a success with no major complications. Multiple modalities of biliary decompression have been developed since early 1970 with ERCP and PTBD as the 2 most common procedure. However, with the development and introduction of EUS-BD, PTBD has fallen out of favor due to high rate of complications. However, EUS-BD is still developing with sparse expertise especially in a developing country. Transcholecysto-cystic duct biliary stenting which our center has done has shown to be simple and effective in biliary decompression even in tortuous cystic duct. More such procedures should be done to know the safety profile and efficacy of such procedure.

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