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WHEN TUBERCULOSIS MASQUERADES AS METASTASIS: UNVEILING AN ATYPICAL CASE OF DISSEMINATED TB

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Extrapulmonary tuberculosis progresses stealthily and often reaches an advanced stage before being diagnosed, due to its diverse clinical manifestations, which can lead to delays in identification. In advanced cases, the disease may resemble malignancy, making image-guided biopsy the gold standard for accurate diagnosis.

A 25-year-old man presented with constitutional symptom and acute bilateral lower limb weakness. He did not have any fever or respiratory symptoms. Contrast enhanced CT and MRI showed multilevel spinal, rib and right pelvic bone lesion with bony destructions and spinal canal narrowing. CT guided biopsy of the thoracic spine lesion was performed revealed necrotising granulomatous inflammation. The patient is currently being treated with anti-tuberculosis drugs.

Radiological signs of spinal tuberculosis include the absence of a primary malignancy, involvement of contiguous thoracic vertebrae, and subligamentous spread beneath the anterior longitudinal ligament. In this case, multiple lesions in the spine, rib, and right pelvic bones with bony destruction noted. With sputum tests negative for acid-fast bacilli, these findings raise the possibility of metastasis.

This case underscores the critical need to consider spinal tuberculosis in the differential diagnosis of spinal metastasis. The overlap in clinical and radiological features emphasizes the importance of image-guided biopsy in securing a definitive diagnosis.

ADRENAL VENOUS SAMPLING IN PRIMARY ALDOSTERONISM COMPLICATION: ADRENAL HEMATOMA

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Adrenal venous sampling (AVS) is a minimally invasive procedure used to determine excess aldosterone production in adrenal glands. Among the complications is adrenal hematoma (AH), which can impact patient outcomes and procedural success. The incidence of AH following AVS is approximately 0.6%, but it is a significant concern due to the potential for serious complications, such as adrenal vein rupture, dissection, or thrombosis. An AVS was planned in a case to diagnose a 36-year-old female with underlying hypertension and left adrenal adenoma. During the cannulation and contrast injection of the right adrenal vein, the patient experienced pain in her back, chest, and shortness of breath. The AVS was abandoned, then proceeded with plain CT Abdomen which showed contrast extravasation at the right adrenal vein, confirming AH. The patient managed to fully recover without further issues and planned for a left adrenalectomy without repeating AVS. Adrenal hematoma commonly occurs at the right adrenal vein due to its vascular anatomy. It can be avoided by usage of cone beam CT to precisely determine the location of the catheter. Besides, patients should avoid deep breathing and remain still to prevent vein collapse and disengagement of catheter from the adrenal vein. In conclusion, AH is a rare but notable complication of AVS. It can lead to additional management challenges; however usually most cases are manageable. AVS remains a critical tool to diagnose primary aldosteronism, but awareness of the potential complications is essential for optimal patient care and diagnosis.

IMAGE GUIDED TENCHKOFF CATHETER INSERTION: NATIONAL CANCER INSTITUTE EXPERIENCE.

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The Tenchkoff catheter, used for peritoneal dialysis in patients with end-stage kidney disease. It requires precise placement to ensure optimal dialysis function and minimize complications. The reliance on image-guided techniques for the insertion of Tenckhoff catheters has transformed the management of patients requiring peritoneal dialysis. A retrospective review of three End Stage Renal Disease (ESRD) patient referred by nephrology department from Hospital Putrajaya who underwent Tenchkoff catheter insertion by interventional radiologists at National Cancer Institute over the past three years. The cases were referred due to underlying patient cause of obesity, resistance of guidewire during blind procedure and low platelet count. The procedure was performed under moderate sedation, utilizing ultrasound and fluoroscopic guidance to ensure accurate catheter placement. The lower abdomen was punctured using micropuncture to access the peritoneal cavity. Subsequently, the catheter placement was confirmed by giving 50cc of contrast within the peritoneal cavity. 4FR sheath inserted followed by guidewire under fluoroscopy guidance and the guidewire exchanged with Amplatz. Dilator of 6Fr, 8Fr, 10Fr, 12Fr, 14 Fr and 16Fr was gradually inserted. Amplatz removed and placement of a tunnelled catheter into the retrovesical space. The patients experienced no immediate complications, and subsequent follow-up indicated effective dialysis function. Interventional radiologists with their specialized training in imaging and minimally invasive techniques, often achieve more favourable results, such as lower rates of catheter malposition and fewer procedural complications. Image-guided Tenckhoff catheter insertion shows a good success rate of 100% with 0% complication. Patient follow-up indicated a high rate of

functional catheters and satisfactory dialysis outcomes. It offers benefits of minimal invasiveness, reduced procedural time, and faster recovery.

UNVEILING THE HIDDEN LEAK: NAVIGATING THE RUPTURE OF GDA PSEUDOANEURYSM

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Keywords: *GDA Pseudoaneurysm, contrast extravasation, leak*

Rupture of a gastroduodenal artery (GDA) pseudoaneurysm is a rare yet life-threatening condition that demands immediate intervention. Intraluminal extravasation, a key imaging feature indicative of active hemorrhage, is often misinterpreted, leading to potentially dangerous delays in treatment. This review underscores the importance of recognizing intraluminal extravasation using multiphase CT abdomen and digital subtraction angiography (DSA). Accurate identification of bowel opacification with contrast during angiography is crucial, as it signals ongoing arterial bleeding, which can escalate to medical emergencies such as hemorrhagic shock. Our experience has shown that multiphase CT is highly sensitive in detecting contrast leakage into the gastrointestinal lumen, while DSA serves not only to confirm the diagnosis but also to facilitate real-time treatment. Endovascular interventions, such as coil embolization, have demonstrated high success rates with minimal complications. Timely recognition and intervention are essential to improve patient outcomes and reduce the high morbidity and mortality associated with ruptured GDA pseudoaneurysms.

RARE BUT REAL: OCCLUSION FROM THE RIGHT MIDDLE CEREBRAL ARTERY DISSECTION PRESENTED WITH ACUTE SUBARACHNOID HAEMORRHAGE.

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Keywords: Middle Cerebral Artery, MCA occlusion, MCA dissection

Intra-arterial dissection (IAD) involving the anterior intracranial circulation is less common than in the posterior circulation. It is even rarer for an intracranial arterial dissection to present with an acute subarachnoid haemorrhage. We report a case of isolated right middle cerebral artery dissection (MCAD) that resulted in a subarachnoid haemorrhage, followed by steno-occlusive complications and hypoxia.

A 29-year-old woman with a history of hypertension presented with a thunderclap headache and giddiness but no neurological deficits. A CT scan revealed an acute subarachnoid haemorrhage (SAH). Digital subtraction angiography (DSA) demonstrated severe stenosis of the M1 segment of the right middle cerebral artery (MCA) with preserved distal perfusion. Subsequent MRI revealed acute infarcts at right corona radiata and MRA also demonstrate the severe stenosis of the right MCA's M1 segment, with the presence of a "shadow sign" suggesting an intramural hematoma, along with plaque enhancement. This led to a diagnosis of isolated MCA dissection, despite the absence of an intimal flap on both DSA and MRI.

High index of suspicion and prompt management is essential in management of flow limiting intracranial dissection. Management of MCAD typically involves dual antiplatelet therapy (DAPT) after the acute phase to prevent secondary strokes. However, DAPT may be insufficient in cases with significant intraluminal stenosis, where perfusion to critical brain regions may be compromised. In such cases, intracranial stenting may be considered.

IATROGENIC INJURY TO THE INTERCOSTAL ARTERY FOLLOWING REMOVAL OF PLEURAL DRAINAGE CATHETER: A CASE REPORT

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Intercostal artery injury is a relatively rare occurrence but possible complication to common thoracic procedures such as pleural drain insertion done for treatment of pleural effusion.

Here, we present a case of an iatrogenic injury to the right 6th intercostal artery following removal of a pleural drainage catheter in a 60-year-old man admitted with partially treated pneumonia complicated by parapneumonic effusion. The initial pigtail drainage was guided by ultrasound, but on the 5th day post-insertion, despite a moderate effusion on imaging, minimal drainage was observed. The catheter was removed with plans for reinsertion, but upon reinsertion, fresh blood was noted in the tubing of the new catheter.

An urgent multidetector computed tomography (CT) angiography revealed an active bleed from the right 6th intercostal artery into the pleural effusion. Immediate coil embolization of the injured artery was performed using two embolic microcoils. Intercostal artery injuries, though rare, can lead to life-threatening bleeding following routine bedside procedures such as pleural drain insertion. Patients who are hemodynamically unstable or exhibit accumulation of haemorrhagic pleural fluid following thoracic procedures should be suspected of having a life-threatening intercostal artery injury. Urgent embolization therapy or, in severe cases, immediate surgical intervention may be necessary.

EFFECTIVENESS OF CONVENTIONAL TRANSARTERIAL CHEMO- EMBOLISATION (cTACE) IN COMPARISON TO DRUG-ELUTING BEADS TRANSARTERIAL CHEMO-EMBOLISATION (DEB-TACE) FOR TREATMENT OF HEPATOCELLULAR CARCINOMA IN HOSPITAL USM, KELANTAN

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Introduction: Transarterial chemoembolization (TACE) is the standard treatment for stage B hepatocellular carcinoma (HCC). Currently, there are two available TACE techniques used – conventional TACE (cTACE) and drug-eluting beads TACE (DEB-TACE). Theoretically, DEB-TACE should have a better tumour response as compared to cTACE. The purpose of this study was to compare the treatment response and the side effects of cTACE and DEB-TACE.

Methods: 161 patients who underwent TACE between January 2012 until April 2022 were included in this retrospective study [cTACE (n = 106) and DEB-TACE (n = 55)] which was conducted in Hospital Universiti Sains Malaysia, Kubang Kerian, Kelantan, Malaysia. Pre- and post-TACE imaging were reviewed and the viable tumour was measured based on mRECIST criteria and assigned to its treatment response categories. The images were further evaluated to identify for side effects related to the procedure in both groups.

Results: 12 patients were categorized under complete response [8 (7.5 %) in cTACE; 4 (7.3 %) in DEB-TACE], 82 patients under partial treatment response [51 (48.1. %) in cTACE; 31 (56.4 %) in DEB-TACE], 21 patients under stable disease [12 (11.3 %) in cTACE; 9 (16.4 %) in DEB-TACE], and 46 patients under progressive disease [35 (33.0 %) in cTACE; 11 (20.0 %) in DEB-TACE]. Statistically, there is no significant difference in tumour response between cTACE and DEB-TACE (p-value of 0.342). A higher percentage of progressive disease was observed in cTACE group as compared to DEB-TACE group. Significant difference in local side effects (dilated bile ducts, portal vein thrombosis, cholecystitis) were observed (p-value of 0.03) as more local side effects were documented in DEB-TACE group. No severe adverse events or procedure-related mortality were observed in both groups.

Conclusion: No significant difference in the effectiveness of cTACE and DEB-TACE in treating HCC patients in terms of tumour response with more local side effects were observed in DEB-TACE group.

RIGHT PLEURAL EFFUSION AS A SEQUELAE OF PYOGENIC LIVER ABSCESS: A CASE REPORT

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Pyogenic liver abscesses are prevalent in tropical regions and more commonly observed in developing countries. It is often caused by parasitic, bacterial, or fungal infections. The occurrence of pleural effusion as a consequence of pyogenic liver abscess is an uncommon clinical manifestation. Here, we present a case report of a 66-year-old man who developed massive right pleural effusion secondary to a liver abscess. The patient had recently undergone endoscopic retrograde cholangiopancreatography (ERCP) and presented with fever and jaundice. Urgent ultrasound and contrast-enhanced computed tomography (CT) of the abdomen revealed a lesion in segment VII of the liver suggestive of a liver abscess. Subsequently, ultrasound-guided pigtail drainage of the liver abscess was performed.

On the second day post-insertion, the patient developed worsening respiratory distress Urgent chest radiograph revealed right pleural effusion. CT thorax confirmed moderate to gross right pleural effusion with adjacent right lung collapse-consolidation. Prompt ultrasound-guided insertion of a pleural drainage catheter resulted in immediate relief of symptoms and improvement in radiological findings. Pleural effusion is an uncommon complication of pyogenic liver abscesses. Timely intervention, including drainage and appropriate antibiotic therapy, is crucial for improving patient prognosis

LOWER LIMB VENOUS THROMBECTOMY USING ASPIRATION DEVICE

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Introduction: Deep vein thrombosis (DVT) is a type of venous thromboembolism treated through various methods including pharmacological therapy, catheter-directed thrombolysis (CDT), pharmaco-mechanical CDT, and percutaneous mechanical thrombectomy. We present two cases involving percutaneous mechanical thrombectomy.

Report: A 53-year-old woman with no known medical illness presented with acute left lower limb swelling and clinical signs of phlegmasia cerulea dolens, suggesting threatened venous ischemia. Ultrasound and CT imaging revealed thrombosis in both deep and superficial veins of left lower limb extending to the distal inferior vena cava (IVC). She underwent IVC filter insertion and aspiration thrombectomy of the left lower limb DVT. We managed to partially recanalized the vein with a favourable outcome on follow-up.
A 33-year-old woman presented with a month-long history of left lower limb swelling. CT venogram showed proximal DVT with suspected compression of the left common iliac vein. She underwent left lower limb venogram, percutaneous mechanical thrombectomy, and venoplasty, successfully recanalizing the left common iliac, external iliac, and common femoral veins. She was later diagnosed with antiphospholipid syndrome. Follow-up CTV indicated a small calibre of the left common iliac vein with suspicious of re-stenosis.

Conclusion: Here we like to highlight the role of percutaneous thrombectomy for DVT with threatened venous ischemia.