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OUTCOME OF BLEOMYCIN SCLEROTHERAPY IN PAEDIATRIC CYSTIC HYGROMA: A SINGLE CENTRE CASE SERIES

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Cystic hygroma is a benign congenital tumor of lymphatic origin which develops around the 6th gestational week. The most common location is the head and neck region and it often requires early intervention due to complications such as respiratory distress, recurrent infection or cosmetic concerns. Bleomycin is an antineoplastic glycopeptide antibiotic agent with sclerosing properties. Other methods of sclerotherapy include ethanol or doxycycline injection. In this case series, we describe the therapeutic use of bleomycin in paediatric cystic hygroma as an alternative to surgical excision. A total of four patients with cystic hygroma were treated with intralesional bleomycin injection at a dosage of 0.5 mg/kg (max dose of 15mg per session) between the period of 2 to 5 months). Followup evaluations showed significant volume reduction (min:90%, max:99% and average percentage 94.5%) in the cystic component of the cystic hygroma in the treated patient with markedly improved clinical symptoms. No major side effects were reported. Minor side effects such as swelling discolouration of the skin were not reported. This demonstrates the safety and effectiveness of bleomycin sclerotherapy as first-line treatment. This case series contributes to the growing body of evidence which supports bleomycin sclerotherapy as a standard management approach for paediatric cystic hygroma.

ENDOVASCULAR EMBOLISATION OF A TRAUMATIC INTERNAL ILIAC ARTERY PSEUDOANEURYSM WITH HIGH FLOW ARTERIOVENOUS FISTULA FOLLOWING BONE MARROW ASPIRATION IN A CHILD- A RARE COMPLICATION OF A COMMON PAEDIATRIC PROCEDURE

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Introduction: Bone marrow aspiration and trephine biopsy (BMAT) is a very common investigative procedure in paediatric population for haematological disorders. A known but rare complication of this procedure is injury to pelvic vasculature.

Case Report: We report a case of a 4-year-old boy with underlying B-cell acute lymphoblastic leukaemia who underwent BMAT using standard technique which led to a traumatic tap. Patient deteriorated and an urgent CT scan revealed extensive retroperitoneal haematoma, secondary to a complex pseudoaneurysm arising from the bifurcation of the right internal iliac artery complicated with a high-flow arteriovenous fistula to the right internal iliac vein.

Discussion: Constructive endovascular repair was not feasible due to the complex nature of the injury as well as non-availability of appropriate covered stent for this age group. Emergency endovascular embolisation was performed using multiple coils at the bifurcation of right internal iliac artery, obliterating the pseudoaneurysm and arteriovenous fistula. The patient tolerated the procedure and recovered well.

Conclusion: To our knowledge, no case reports of traumatic injury following BMAT leading to both pseudoaneurysm and arteriovenous fistula in paediatric population have been published at the time of this report. Endovascular embolisation can be safely performed in paediatric population and offers an excellent alternative to open surgical repair.

TRIUMPH OVER LYMPH: A CASE REPORT ON THE EFFICACY OF LYMPHATIC EMBOLIZATION IN MANAGING POST-RENAL TRANSPLANT LYMPHOCELE

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Introduction: A lymphocele is a collection of lymphatic fluid that occurs as a complication following surgical procedures involving lymph node dissection, such as renal transplantation, pelvic surgery, or lymphadenectomy. It leads to the accumulation of lymphatic fluid in surrounding tissues. Small, asymptomatic lymphoceles may resolve spontaneously and can be managed conservatively. In cases where the lymphocele increases in size, initial intervention usually involves percutaneous catheter drainage. If the lymphocele persists or recurs after drainage, lymphatic embolization or sclerotherapy can be considered. Surgical fenestration or lymphovenous bypass may be considered if minimally invasive treatments fail. In refractory cases, lymphocelectomy may be necessary.

Case Report: A patient underwent successful pre-emptive renal transplant. Post-operative evaluations indicated good renal function and excellent kidney perfusion. Two weeks post-operatively, a routine ultrasound revealed perinephric fluid collection. By six weeks post-operatively, the collection had increased and readmission was required for drainage. Persistent high amounts of drainage fluid were noted during follow-up. The patient was readmitted again and underwent right inguinal intranodal lymphangiography and lymphatic embolization with Lipiodol and Histoacryl glue. Drainage fluid ceased 4 days post-embolization, and the drainage catheter was removed. A follow-up ultrasound at 3 weeks showed no recurrence of the pelvic fluid collection.

Conclusion: Lymphatic embolization is a safe and effective minimally invasive treatment option for managing post-operative pelvic lymphoceles. The procedure led to the successful resolution of the patient's symptoms without the need for surgical intervention, and no complications were observed post-procedure. This case highlights the efficacy of lymphatic embolization in treating persistent or recurrent lymphoceles following initial drainage.

THE OUTCOME AND FACTORS INFLUENCING THE SUCCESS OF MECHANICAL THROMBECTOMY IN PATIENT WITH ARTERIOVENOUS FISTULAE THROMBOSIS IN HOSPITAL PAKAR UNIVERSITI SAINS MALAYSIA

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Introduction: The Hyperintense Vessel Sign (HVS) on FLAIR MRI is a subtle yet critical marker of arterial occlusion in acute ischemic stroke. Its timely detection can influence decisions regarding thrombolysis or thrombectomy eligibility. However, manual HVS identification is time-intensive and prone to inter-observer variability, especially in high-pressure emergency settings. We present a novel deep learning-based triage tool designed to assist radiologists by automating HVS detection with high computational efficiency and clinical reliability.

Method: A total of 300 FLAIR MRI datasets were retrospectively collected from Hospital Sultan Abdul Aziz Shah (HSAAS), UPM, obtained using a standardized protocol on a 3T scanner. A deep learning model based on the nnU-Net architecture was developed to detect HVS with pixel-level precision. The model was trained using 5-fold cross-validation and tested against annotations by three board-certified neuroradiologists (gold standard). Inference was conducted on an RTX 4080 GPU with an average runtime of 30 seconds per scan. Novel features included the integration of explainable AI (XAI) techniques to enhance model transparency and improve radiologist trust in AI outputs.

Results: The model achieved a sensitivity of 89%, specificity of 84%, and Dice score of 0.78 ± 0.11 compared to radiologists' consensus annotations (accuracy: 95%). While radiologists outperformed the model diagnostically, the tool reduced average triage decision time by 40%, prioritizing high-risk cases for review without compromising safety. Importantly, XAI visualizations provided interpretable heatmaps highlighting regions of interest, which radiologists reported as valuable for cross-verification during time-critical scenarios.

Conclusion: By reducing decision-making time while maintaining diagnostic accuracy, this approach has the potential to transform stroke workflows in resource-limited or high-volume settings. Future work will focus on integrating this tool into real-time clinical pipelines and expanding its application to multi-modal imaging data for comprehensive stroke assessment.

RIGHT CAROTICAVERNOUS FISTULA WITH PREDOMINANT CONTRALATERAL OCULAR SYMPTOMS: A RARE PRESENTATION

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Introduction: The Caroticocavernous fistula (CCF) is an abnormal arteriovenous connection between the carotid artery and cavernous sinus (CS). Typically, symptoms such as ophthalmoplegia, redness and pulsatile proptosis present ipsilateral to the site of CCF; however, contralateral manifestations, though rare, can occur with only one case reported in literature

Case Report: We present the case of a 76-year-old, female who sustained traumatic multiple intracranial haemorrhages. Three months later, she developed bilateral cranial nerve VI palsy, which was managed conservatively as repeated imaging was unremarkable. One month after, she developed left-sided eye redness and pulsatile proptosis. Computed tomography angiogram revealed bulky bilateral CS and dilated left superior ophthalmic vein (SOV). Digital subtraction angiography demonstrated right-sided direct CCF with dilated left SOV.

Discussion: The transarterial embolization of right CCF led to symptoms improvement. Severity and distribution of symptoms depend on CCF drainage pattern, with commonest route being anteriorly via the ophthalmic veins. Contralateral drainage via intercavernous connection is rare. It is hypothesized that extensive intercavernous sinus connections, allows increased pressure transmission between the paired CS, leading to contralateral CCF.

Conclusion: This case highlights the progressive nature of CCFs and importance of long-term monitoring in post-traumatic patients. Prompt recognition and intervention are crucial in preventing complications and ensuring favourable clinical outcomes.

RUPTURED HEPATOCELLULAR CARCINOMA (HCC) POST CHIROPRACTIC MANIPULATION

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Spontaneous rupture of hepatocellular carcinoma (rHCC) is a life-threatening complication, occurring in 3–15% of HCC cases. This report describes a 41-year-old male with congenital hepatitis B who had defaulted on HCC surveillance. He experienced crampy abdominal pain for one day and sought chiropractic manipulation, during which he developed epigastric pain. He later had a syncopal episode, nausea, vomiting, and hypovolemic shock. Contrast-enhanced CT confirmed rHCC in the caudate lobe. He underwent transarterial embolization (TAE) and was discharged with oncology follow-up. Hepatectomy was not feasible, and palliative therapy was initiated. The exact mechanism of rHCC remains unclear but likely involves venous congestion, vascular injury, and the small room hypothesis. Overall, this case may represent a spontaneous rHCC, potentially exacerbated by chiropractic manipulation. Two key take-home messages emerge from this case: First, chronic hepatitis patients should adhere to annual surveillance for early HCC detection. Second, while chiropractic techniques are unlikely to directly cause tumor rupture, excessive mechanical stress may increase the risk in specific conditions. Therefore, patients with HCC should consult a healthcare professional before undergoing chiropractic care or deep tissue massage to avoid potential complications.

CHEMORADIOTHERAPY IN LUNG CANCER: A DOUBLE-EDGED SWORD – A CASE REPORT AND LITERATURE REVIEW OF SUPERIOR VENA CAVA OBSTRUCTION AS AN UNEXPECTED COMPLICATION

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Superior vena cava syndrome (SVCS) is a condition which arises from superior vena cava obstruction (SVCO) secondary to direct invasion by malignancies such as lung cancer. While chemoradiotherapy is standard treatment for SVCS due to malignancies, it is also a rare cause of SVCO, through chemoradiotherapy-induced fibrosis. We present the case of a 47-year-old male with advanced lung adenocarcinoma, who developed SVCO following multiple cycles of chemoradiotherapy. Imaging confirmed SVC stenosis with extensive collateral formation with no evidence of left lung mass invasion. Emergency tracheostomy and successful SVC stenting led to symptoms improvement. Despite multiple interventions, the patient developed tracheoesophageal fistula leading to respiratory decline, infection and eventual demise. This case underscores the complexities of managing advanced lung adenocarcinoma and its complications. Traditionally, chemoradiotherapy was employed for treatment of SVCO secondary to mass effect from malignancies. However, six literatures identified worldwide have linked SVCO to chemoradiotherapy. An inflammatory response from chemoradiotherapy is believed to cause increased vascular permeability and subsequent fibrosis leading to SVCO, which was the likely causative factor in our case. Hence, clinicians should maintain a high index of suspicion for treatment-related SVCS and ensure close monitoring for early detection and timely intervention to optimize patient outcomes.