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ORBITAL MARVELS: A MODERN APPROACH TO VENOUS-LYMPHATIC MALFORMATION

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Introduction: Orbital venous-lymphatic malformation is a benign condition resulting in cosmetic and functional dysfunction. Surgical resection or ablation of the tumour remains the mainstay of treatments, but it can be very challenging and complicated due to its infiltrative and vascular nature with high recurrence rate. We hereby report a case of percutaneous sclerotherapy of an orbital venous-lymphatic vascular malformation done in our centre.

Case Report: A 16-year-old girl presented with 1-month history of left eye proptosis associated with blurring of vision and pain during eye movement. Examination revealed a restricted left eye movement, reduced visual acuity of the left eye with positive relative afferent pupillary defect (RAPD) and a hyperemic left optic disc. Left orbital venous-lymphatic malformation was diagnosed with MRI. Patient was referred to interventional radiology for pre-operative embolization prior to surgical resection by the ophthalmologist. Percutaneous sclerotherapy using Bleomycin was performed and the patient was reviewed in interventional radiology clinic three weeks later. There is improvement in terms of left eye pain and left eye vision. Reassessment ultrasound and MRI showed smaller lesion. She is currently awaiting her date for surgical resection of the lesion.

Discussion: Less invasive procedure is the preferred treatment method in most of the conditions nowadays. Percutaneous sclerotherapy of venous-lymphatic malformation can be adjunctive and even the sole treatment for selected cases. The common sclerosants used in the literature are Bleomycin, sodium tetradecyl sulfate (STS) and ethanol. Bleomycin has both antineoplastic and antibiotic properties and is proven to have higher efficacy in comparison to STS with few sessions needed to treat the lesson and lower recurrence in low flow vascular malformation.

Conclusion: To date, few studies have been done to show the efficacy of percutaneous sclerotherapy in orbital venous-lymphatic vascular malformation. This is a field worth exploring.

TRANSBRACHIAL ENDOVASCULAR EXCLUSION: UNVEILING A MINIMALLY INVASIVE APPROACH FOR PROXIMAL ANASTOMOTIC AXILLOFEMORAL BYPASS PSEUDOANEURYSM IN A PATIENT WITH PACEMAKER

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Introduction: Anastomotic pseudoaneurysm, is a rare complication of arterial bypass procedures, particularly in the upper limbs. It can be attributed to various factors such as postoperative infection, suture fatigue, poor suture material, trauma, or mechanical obstruction. The turbulent blood flow within the anastomotic region is believed to gradually weaken the arterial wall, leading to anastomotic leaks. Over the past decade, the management approach for this condition has undergone a significant transformation, shifting away from conventional surgical methods towards minimally invasive endovascular techniques. This paradigm shift offers a less invasive and more refined approach to treating anastomotic pseudoaneurysms. Here, we would like to present a peculiar case of proximal anastomotic axillofemoral bypass pseudoaneurysm in a patient with pacemaker which was successfully treated with placement of a covered stent.

Case Report: A complex case of a 58-year-old gentleman, with history of bilateral above-knee amputations and past medical history of infrarenal abdominal aortic mycotic aneurysm in 2021, which was surgically treated by aneurysmal ligation and axillobifemoral bypass graft placement. The surgery was complicated several times by graft infection and thrombosis; hence it was revised and a left axillofemoral graft was placed. The patient also had a concurrent symptomatic complete heart block treated with the placement of permanent pacemaker in August 2022. He presented this time again with swelling, bleeding and pus discharged from the left anterior chest wall adjacent to the axillary region. A contrasted CT angiography done revealed presence of left axillofemoral graft pseudoaneurysm at the proximal anastomotic side adjacent to the pacemaker. An angiogram was done at the subclavian artery via transbrachial approach to measure the size of the aneurysm. Subsequently a Covera Plus vascular-covered stent was placed at the aneurysmal side. Post-placement angiogram showed stent in situ with resolved pseudoaneurysm.

Conclusion: By adopting minimally invasive endovascular interventions, healthcare professionals can achieve successful outcomes while minimizing patient discomfort and recovery time. These advanced techniques have opened up new possibilities for managing anastomotic pseudoaneurysms, providing improved patient care and long-term outcomes.

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RECURRENT LARYNGEAL NERVE PALSY: AN UNEXPECTED COMPLICATION OF RADIOFREQUENCY ABLATION OF LUNG METASTASIS

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Introduction: The usage of radiofrequency ablation (RFA) therapy is now more widespread to involve many types of tumors. Despite its good safety profile, minor complications involving recurrent laryngeal nerve injury is rare and not well-recognized by interventional radiologists leading to treatment delay.

Case Report: We present a case of a 65 year old female patient with underlying caecal adenocarcinoma complicated with isolated lung metastasis in which two nodules were unresponsive to chemotherapy and treated with RFA. RFA of the right apical upper lobe nodule has inadvertently resulted in recurrent laryngeal nerve injury. Patient was initially planned for injection laryngoplasty (IL) however, her symptoms resolved spontaneously within three months after procedure.

Conclusion: We would like to emphasize on the importance of recognizing this rare complication, thus a more constructed informed consent could be done to patients and better preparation towards preventive methods could be applied, as disastrous outcomes may be inevitable.

"BROKEN PIECES": A CASE SERIES

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Introduction: The insertion of catheters for diagnostic and therapeutic purposes are widely regarded as reliable and safe. However, risks of fractured or dislodged catheters still exist, and these risks are unforeseen. We present case series of fragmented catheters during interventional angiography and discuss technical details of each case.

Report:

Case 1: 50 years old gentleman with left temporal lobe arteriovenous malformation underwent cerebral angiogram complicated with fragmented catheter at left CCA-ICA junction with secondary fracture and its segments migrated to mid-segment right ICA. The fragmented piece was successfully retrieved by React Aspiration catheter 0.071. On follow up, no neurological deficit.

Case 2: 75 years old gentleman with hepatocellular carcinoma underwent transchemoembolization complicated with fragmented catheter. The shorter fragment lodged at small branch of the left profunda femoris artery. The longer fragment lodged at left middle segmental renal artery. Few attempts of retrieval via Snare 6Fr, flower loop and micro snare however unsuccessful. On follow up, no renal impairment or lower limb disability.

Case 3: 76 years old gentleman underwent central venogram and plasty for central venous occlusion. Noted fractured catheter tip during manipulation, fractured fragment was in right atrium. Trial of snare using modified snare 0.035" x 150cm guide wire. Fragment dislodge to pulmonary trunk, flush aortogram performed with pigtail catheter. Retrial snare using pigtail catheter, En Snare 6Frx120cm and was successful with Multisnare 4Frx125cm. Central venoplasty was successful.

Conclusion: To summarize, while endovascular procedures appear to be safe, intravascular fragmented catheter complications needs to be highlighted. It can be mitigated with proper device selection, precautions and knowledge of such retrieval techniques is at utmost priority.

SUCCESSFUL ENDOVASCULAR APPROACH OF COMPLEX IATROGENIC FEMORAL ARTERY INJURIES

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Introduction: Iatrogenic injuries to the femoral artery have become more common in recent years due to the increase in percutaneous transfemoral catheterization procedure. Among all manifestation of vascular injuries, femoral artery pseudoaneurysm represent the most common iatrogenic femoral vascular injury. Interventional radiological treatment has evolved and replaced surgical intervention.

Case Report: We reported a case of 36 years old patient who underwent femoral vein catheterization attempt for dialysis vascular access complicated with complex iatrogenic bilateral femoral artery injuries. Patient developed right bilobed pseudoaneurysm arising from the right superficial femoral artery and left pseudoaneurysm arising from medial circumflex artery, branching from the left common femoral artery with arteriovenous fistula involving the left superficial femoral artery and left femoral vein. Successful closure of these bilateral complex femoral artery injuries by using endovascular stent placement, coiling and gelfoam embolization.

Conclusion: Radiology offers effective minimally invasive techniques to treat vascular injuries. A practical imaging examination to localize the injury and to assess the surrounding structures and vascular anatomy is essential for deciding on the intervention technique. The endovascular approach has proven beneficial in the treatment of femoral vascular injuries and reduces morbidity and mortality rates.