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EP19

DAVF CHRONICLES: THE TALE OF RECURRENCE AFTER EFFECTIVE ENDOVASCULAR MANAGEMENT

L. Jamaludin[1]
[1]Department of Biomedical Imaging, Universiti Malaya Medical Centre, 50603 Petaling Jaya, Selangor, Malaysia

Introduction: Endovascular embolization with Onyx has been increasingly used to treat intracranial and spinal dural arteriovenous fistulas (DAVFs). Several case series have been published in recent years reporting high DAVF cure rates with this technique. Although it is seldom reported, DAVF recurrence may occur despite initial "cure." We reported a case of a recurrent DAVF after successful transarterial Onyx embolization.

Case Report: Patient presented with neurological deficit which imaging shows presence of intracranial haemorrhage. 1 year post incident, patient presented back with worsening neurological deficit which urgent imaging of CT and MRI confirms presence of DAVF. Urgent intervention using Onyx was performed with successful outcome. Follow up imaging and angiogram 2 months post intervention shows no residual DAVF with improving clinical conditions. However, 7 months post intervention, patient presented with seizure and follow up imaging shows suspicious evidence of recanalization which was confirmed with cerebral angiogram assessment. Successful endovascular treatment of the recurrent DAVF was achieved using Onyx.

Conclusion: Despite adequate Onyx penetration into the fistula and draining vein, this case demonstrates that DAVF recanalization may reappear with filling from newly recruited arterial feeders. We are highlighting the need for awareness of this possible phenomenon and suggest that follow-up angiography should be considered in patients treated with catheter embolization.

EP20

SPONTANEOUS OCCLUSION OF TRAUMATIC CAROTICOCAVERNOUS FISTULA (CCF) DURING ICA STENTING FOR SUPRACLINOID ICA ANEURYSM

I. F. Yusoff[1], N. F. I. Khalid[1], N. Ehsan[1]
[1]Department of Radiology, Hospital Sultanah Aminah Johor Bahru, 80100 Johor Bahru, Malaysia

Introduction: Endovascular coil placement, stent deployment and assisted coiling has been part of the neurointerventional procedure for treatment of intracranial internal carotid artery (ICA) aneurysm which can pose complications such as aneurysmal rupture, arterial injury, thromboembolism and vessel thrombosis. Less known and reported complication of these treatments is direct caroticocavernous fistula (CCF). Our case is to highlight traumatic CCF that occurred during ICA stenting can be treated conservatively given the patient is asymptomatic.

Case Presentation: 60 years-old lady presented with severe headache and non-contrasted CT revealed subarachnoid haemorrhage with right supraclinoid ICA aneurysm that is further confirmed on cerebral angiogram. Right ICA stenting was performed, in which new direct caroticocavernous fistula (CCF) was noted during intraprocedural angiogram, drains into the cavernous sinus and inferior petrosal sinus. Post stenting angiogram showed CCF persists with no cortical venous reflux. Patient discharged well with no signs and symptoms of CCF, hence managed conservatively with close follow up and continuation of double antiplatelet. This patient remained asymptomatic during follow up with repeat angiogram three months post stenting showed obliteration of the supraclinoid ICA aneurysm and spontaneous occlusion of the direct CCF.

Discussion: Traumatic CCF during ICA endovascular treatment is less reported and most cases reported was subjected to immediate endovascular treatment. Although not well understood, spontaneous occlusion can be attributed to the clot formation by iodinated contrast material at the injured vessel wall, thrombosis of the cavernous sinus and stasis of the venous drainage system. Given patient is asymptomatic and antegrade fistulous flow, there is role for conservative treatment.

Conclusion: In the emergent endovascular treatment for ICA aneurysm, our case demonstrates that direct CCF can occur as part of treatment complication. Although direct CCF commonly treated as an emergency, this case highlights that conservative treatment and close follow up can be considered in the context patient is asymptomatic.

EP21

PSEUDOANEURYSM OF SUPERFICIAL FEMORAL ARTERY: A TALE OF CATASTROPHIC COMPLICATION POST ILIZAROV FIXATION

N. Khalim[1], S. H. Koh[1], N. Ehsan[1]
[1]Department of Radiology, Hospital Sultanah Aminah Johor Bahru, 80100 Johor Bahru, Malaysia

Introduction: Vascular injury post Ilizarov fixation of femur is rarely described in literature. The process of inserting pins and wires through the bones and distraction force impose the risk of vascular or nerve injury. We hereby report a case of pseudoaneurysm of superficial femoral artery post Ilizarov fixation which was successfully treated by a covered stent in our centre.

Case Presentation: A 41 year-old gentleman sustained comminuted fracture of mid shaft left femur from a motor vehicle accident. Percutaneous stabilisation was done using an Ilizarov external fixator. He presented with left thigh swelling for 1 weeks and bleeding around the Schanz pins proximal to the fracture site post procedure. Computed tomography angiography (CTA) done showed a pseudoaneurysm arising from the distal left superficial femoral artery inferior to the 3rd pin site. Digital substraction angiography revealed a large wide necked pseudoaneurysm at the left mid superficial femoral artery. A covered stent was deployed and successfully resolved the pseudoaneurysm.

Discussion: The classical symptoms are persistent bleeding and swelling from either the wound or the pin/wire site. In this case, the complication was resolved early but delayed presentation up to several weeks or years has also been described. It is usually due to a spike of fractured bone, protruding cortical screw tip or over-penetration by a drill-bit leading to catastrophic injury and disruption of the arterial wall.

Conclusion: Pseudoaneurysm of the superficial femoral artery following orthopaedic procedures are rare occurrence. A high index of suspicion is vital for early recognition and managing the catastrophic complication. Endovascular embolization is safe and effective approach to reduce the morbidity and mortality associated with this condition.

EP22

PERCUTANEOUS EMBOLIZATION OF PROFUNDA FEMORIS ARTERY PSEUDOANEURYSM IN WARFARIN-INDUCED OVERANTICOAGULATION

S. J. Chin[1], N. F. Nik Fuad[1]
[1]Department of Radiology, Hospital Canselor Tuanku Muhriz UKM, Bandar Tun Razak, 56000 Cheras, Selangor, Malaysia

Introduction: Profunda femoris artery (PFA) pseudoaneurysms are rarely encountered. Most of the reported cases are related to trauma or iatrogenic injuries. Anticoagulant use and hypertension are risk factors for developing a femoral artery pseudoaneurysm. The deep anatomical location of PFA can make clinical evaluation challenging; hence, imaging is crucial in the diagnosis of PFA pseudoaneurysms. Interventional radiological treatment has become the preferred treatment strategy for managing pseudoaneurysms in recent years. The preferred treatment approach is endovascular. The percutaneous approach can be used in specific circumstances.

Results: We present a case of PFA pseudoaneurysm that developed spontaneously due to overdose of warfarin. Computed tomography (CT) and conventional angiography confirmed a pseudoaneurysm arising from collateral vessel from the right PFA. The patient was successfully treated with percutaneous embolization of the right PFA pseudoaneurysm using coils and gelform with no complications.

Conclusion: PFA pseudoaneurysms are very uncommon and can be caused by trauma or iatrogenic injuries. Conventional angiography is the gold standard diagnostic tool for pseudoaneurysms, in addition to treatment planning. The preferred treatment strategy is minimally invasive radiological intervention. The approach and materials used in managing pseudoaneurysms depend on a number of factors. Endovascular approach is the preferred mode of treatment. In certain conditions, such as in our case, the percutaneous technique can be employed.

EP23

EMERGING FROM THE DEPTHS: RENAL EMBOLIZATION'S LIFESAVING TOUCH IN POLYARTERITIS NODOSA

M. S. Mohd Azman[1], W. A. I. Wan Azman[1], K. Azmi[1]
[1]Department of Biomedical Imaging, Universiti Malaya Medical Centre, 50603 Petaling Jaya, Selangor, Malaysia

Introduction: Spontaneous subcapsular renal hematoma is an infrequent medical condition. Polyarteritis nodosa (PAN) is characterized by necrotizing vasculitis, which leads to the formation of nodules in small and medium-sized arteries. PAN often affects the kidneys, with kidney involvement seen in over 70% of PAN patients. Common symptoms of PAN with kidney involvement include hematuria, proteinuria, and kidney failure. The occurrence of spontaneous perirenal bleeding due to PAN is rare and was initially documented by Schmidt in 1908. This complication is observed in approximately 4-13% of PAN cases and can manifest unilaterally or bilaterally. Consequently, the mortality rate, renal prognosis, and appropriate treatment strategies remain incompletely understood.

Case Presentation: We describe a case of an 80-years-old male with a background history of stage three chronic kidney disease who presented with a three-day history of abdominal pain and severe anemia. A computed tomography revealed a right renal subcapsular active bleed with large right retroperitoneal hematoma. Soon after, an emergency angiography was performed which revealed numerous microaneurysm and multiple points of contrast blush from the upper, mid and lower pole segmental arteries. Diagnosis of polyarteritis nodosa was made from imaging. Due to the extensive point of bleeding, he was then subjected to right main renal artery embolisation. He was discharged well 10 days later with renal replacement therapy on board.

Conclusion: When an initial manifestation of classic polyarteritis nodosa is the occurrence of an unanticipated perirenal hematoma, there is a higher probability of encountering a delay in achieving the accurate diagnosis. Angiography offers the advantage of not only enabling a prompt diagnosis but also facilitating therapeutic embolization. For individuals with classic polyarteritis nodosa and bleeding from a ruptured aneurysm, angiography could serve as a main therapeutic option instead of surgery.

EP24

DEFYING THE ODDS: ILEAL ANGIODYSPLASIA EMBOLIZATION IN A COMPLEX OVARIAN CANCER PATIENT WITH RECURRENT LOWER GI BLEEDING

W. A. I. Wan Azman[1], W. L. Ng[1]
[1]Department of Biomedical Imaging, Universiti Malaya Medical Centre, 50603 Petaling Jaya, Selangor, Malaysia

Background: Ileal angiodysplasia, a rare vascular anomaly in the ileum, is challenging due to recurrent lower gastrointestinal (GI) bleeding. Managing it in patients with complex medical histories, like ovarian cancer and multiple surgeries, requires timely intervention.

Case Report: A 55-year-old female with ovarian cancer, multiple surgeries, and recurrent GI bleeding was referred after a severe episode. Despite transfusions, her hemoglobin dropped significantly. A contrast-enhanced CT scan showed contrast extravasation in the distal ileum. Selective angiography of the superior mesenteric artery (SMA) showed no obvious contrast extravasation. However, super-selective catheterization of the ileal branch revealed a contrast blush**.** The hypervascular blush was successfully embolized using gelfoam. Post-embolization imaging showed resolution. She was discharged in stable condition seven days post-embolization.

Conclusion: Ileal angiodysplasia embolization effectively managed recurrent lower GI bleeding in a patient with ovarian cancer and a complex surgical history. This case underscores the importance of prompt diagnosis and minimally invasive embolization techniques, even when subtle angiographic findings necessitate super-selective catheterization**.**