

Background: The ability to safely achieve hemostasis is a key aspect of percutaneous vascular access. Vascular closure devices (VCDs) were designed to improve the safety of vascular closure; however this has been difficult to prove in recent studies. We present our experience with achieving hemostasis including assessing the safety and efficacy of VCDs. The aim of this study is to assess the technical success, complications and associated risk factors for achieving hemostasis in antegrade femoral punctures for infrainguinal interventions. **Method(s):** A retrospective review of all patients who underwent antegrade common femoral puncture for infrainguinal endovascular procedures between January 2016 and November 2018. Access site hemostasis was achieved either using VCD or manual compression (MC). Patient demographics, body mass index (BMI), previous ipsilateral groin punctures and surgeries, skin to vessel distance, common femoral artery (CFA) diameter, sheath size and complications were recorded. **Result(s):** A total of 175 antegrade femoral punctures were performed in 159 patients. Mean patient age was 65 years (21-102). Male:female ratio was 120:39 patients and mean BMI was 27.2 (16.24-43.79). Mean CFA diameter was 7.5 mm (3.5-12.7 mm) and mean skin to vessel distance (SVD) was 33.7 mm (9.6-20 mm). Sheath sizes utilized were 5 Fr (n=93), 6 Fr (n=66), 4 Fr (n=13), and 7 Fr (n=3). MC was used to achieve hemostasis in 46% (n=81) of patients. Angioseal was the most commonly used VCD in 43.6% (n=41), Exoseal 36% (n=34) and Proglide in 20% (n=19). Technical success in the VCD group was 92.5% (n=87). Six patients experienced complications (VCD=4; MC=2) including groin hematoma, pseudoaneurysm, distal thromboembolism and arterial perforation. **Conclusion(s):** In our experience, vascular closure devices are effective and safe in antegrade arterial procedure with limited number of complications. A larger study is required to compare vascular closure devices in antegrade punctures.

OC3.9

To Determine Efficacy of Bilateral Inferior Petrosal Sinus Sampling in Differentiating Cushing Disease from Ectopic Cushing Syndrome

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Background: ACTH dependent cushing syndrome is further divided into cushing disease and ectopic cushing syndrome. Bilateral inferior petrosal sinus sampling (BIPSS) is a reliable tool in differentiating these two entities specially in cases where MRI findings are equivocal. **Method(s):** This is a retrospective study which includes all patients who underwent BIPSS at department of radiology AKUH with clinical diagnosis of ACTH dependent cushing syndrome. Histopathology correlation is considered gold standard. **Result(s):** In total 23 patients underwent bilateral inferior petrosal sinus sampling from 2006-2017, out of these 1 patient was excluded from the study on the basis of inadequate sampling 11 patients had no MRI or histopathology correlation. In the remaining 11 patients 8 were diagnosed as Cushing disease on BIPSS and proven to have pituitary adenoma on histopathology

while 3 patients diagnosed with peripheral source of ACTH were diagnosed on histopathology to have bronchial carcinoid. **Conclusion(s):** In our study sensitivity of bilateral inferior petrosal sinus sampling was found to be 100 %. Although with advent of dynamic weighted MR imaging with pituitary protocol the utility of BIPSS has declined over time due to the invasive nature of the procedure however it is still a reliable test in cases where MRI findings are equivocal and inconclusive.

OC3.10

Femoral-Popliteal versus Long Superficial Femoral Artery Stent

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Background: The aim of this cohort study is to compare two modalities of treating long occlusion in the superficial femoral artery as a cause for critical leg ischemia; angioplasty with stenting vs a femoral-popliteal bypass and the rate of limb salvage and intervention needed to maintain patency. **Method(s):** We retrospectively obtained and reviewed data on all patients at the northampton general hospital with severe peripheral vascular disease who had long SFA stents during a 3 year interval commencing from April 1 2014 to march 31st 2017 and compared the patency and the need for a secondary intervention to a group of patients who had a femoral popliteal bypass during this same time period. All patients involved in this study were patients with severe peripheral vascular disease failing best medical management or presenting with evidence of critical limb ischaemia with evidence of tissue loss or rest pain. Best medical management entails patients being on a statin, an antiplatelet, having good control of hypertension and diabetes and smoking cessation advice. All patients had an arterial duplex assessment before and surveillance after an intervention to assess disease severity and patency respectively. Femoral-popliteal bypass procedure included patients who had either above or below knee bypass as well as patients who had a vein or a prosthetic used for the conduit. Primary patency was calculated from the time of the initial intervention until the time that there was occlusion. For patients who developed a significant stenosis and needed an intervention to maintain patency they were referred to as assisted primary patency and was calculated from the time of initial procedure to the time of occlusion. **Result(s):** Femoral-popliteal bypass of the 28 patients who had a femoral-popliteal bypass procedure, 22 were males and 6 females. The mean age of patients in this audit was 72.1 years. The youngest patient to have this procedure was 49 years old and the oldest being 92 years of age and almost half of this cohort (46.4%) were over the age of 75 years. Of the 28 patients that were operated on 2 died in hospital or within 30 days of having the operation, hence leaving only 26 patients in the surveillance population. All the patients who died were over the 78 years of age. 20 (86.95%) patients in this study had the long saphenous vein used for their bypass conduit while 3 (13.05%) patients had PTFE. **Conclusion(s):** Of a group of patients who share similar demographics the patency rate of femoral popliteal bypass was superior to that of long SFA stents 74% vs 56%. For both groups however, the need for a second intervention to maintain primary patency was similar