

but it requires special skills and long waiting time for fEVAR. Also management of type 1 endoleak is the most challenging leak to deal with. The emerging technology with endoanchors brought reasonable solution to deal with short neck using standard EVAR and to treat type 1 endoleak. **Method(s):** We will review the endoanchors registry and our experience in Saudi in using endoanchors as prophylactic to prevent and as therapeutic to treat type 1 endoleak. **Result(s):** The result from endoanchors registry and our experience is very promising. **Conclusion(s):** Endoanchors can be used as prophylactic in challenge neck anatomy to prevent type 1 endoleak and as therapeutic to treat type 1 endoleak.

### OC3.6

#### Endovascular Treatment of Visceral Arteries Pseudoaneurysms by Covered Stents

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**Background:** Pseudoaneurysms of the visceral arteries are rare, but remain a therapeutic challenge given the high morbidity and mortality of the surgical treatment. We evaluated the value of their endovascular treatment by covered stents. **Method(s):** This is a retrospective, single-center study conducted from December 2015 to June 2018. All patients presenting with pseudoaneurysms of the visceral arteries (coeliac trunk, superior mesenteric and inferior mesenteric arteries and their branches) documented by cross sectional imaging were included. Endovascular treatment with covered stents was done. The pseudoaneurysm cause, site, size, distance from artery origin, the artery caliber, tortuosity, the angle between the artery ostium and the abdominal aorta, the duration of the procedure, the access site, the materials used, the technical success rate, the immediate and delayed complications at the first and last follow up were collected. **Result(s):** 21 interventions were performed on 19 patients. The majority were males with a median age of 60 years. The pseudoaneurysms were most commonly located in the hepatic arteries with liver transplantation being the most common etiology. Right femoral access was used in 9 patients and left brachial access was used in 10 patients. The median procedure time was 58 minutes. The technical success rate was 79% (15/19). Failure was due to artery dissection (3/19) or malcoaptation of the stent (1/19). The median duration before the first follow up was 45 days and 12 months before the last follow up. Complications encountered included perforation (1/19), endoleak (1/19), recurrence (1/19), partial (3/19) or complete (2/19) thrombosis. There was no procedure-related mortality. **Conclusion(s):** Endovascular treatment of visceral arteries pseudoaneurysms by covered stents is feasible, safe and effective. The brachial access is preferred in technically challenging cases due to certain anatomical factors such as increased artery tortuosity or increased distance from the artery origin.

### OC3.7

#### Modified Pressure Cooker Technique: An Effective Way to Control Ethylene Vinyl Alcohol Copolymer Reflux in Peripheral Arteriovenous Malformations

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**Background:** Embolization of high flow pAVMs is a technical challenge. ethylene vinyl alcohol (EVOH) copolymer is a safe and effective liquid embolic agent routinely used in intracranial AVMs and its use is recently reported in peripheral AVMs as well. Most important technical challenge during ethylene vinyl alcohol (EVOH) copolymer injection is control of reflux. Modified Pressure Cooker Technique (mPCT) is a method to prevent reflux of EVOH which is well described in intracranial AVMs, however not reported in peripheral AVMs. In Modified Pressure Cooker Technique a glue plug is created proximal to the delivery tip of detachable microcatheter in a unique way. We describe successful use of modified Pressure Cooker Technique (mPCT) in peripheral AVMs to control reflux and achieve adequate embolization. **Method(s):** Three patients with high flow peripheral AVMs were treated with ethylene vinyl alcohol (EVOH) copolymer (MENOX 18) embolization using modified Pressure Cooker Technique. We used Ultrasound guided Femoral access in all 3 cases. We used coaxial system using 7F 70 cm long Guiding sheath and intermediate catheter DAC 070. We used Combination of EVOH compatible detachable microcatheter (APOLLO 3 cm tip) and a non detachable microcatheter (Echelon 10) for nBCA glue plug creation needed for mPCT. We injected EVOH copolymer (Menox 18) via detachable APOLLO micro catheter and NBCA injection via the proximal catheter to create a glue plug to prevent EVOH copolymer reflux during injection of EVOH copolymer. **Result(s):** We achieved 100% Technical success: ethylene vinyl alcohol (EVOH) copolymer did not reflux proximal to the glued segment of the detachable microcatheter and we had safe removal of detachable microcatheter post embolisation. Satisfactory embolization of the target nidus in all. No intra-operative complications. **Conclusion(s):** Use of modified Pressure Cooker Technique (mPCT) in peripheral AVMs is: (1) Safe and effective for ethylene vinyl alcohol (EVOH) copolymer injection. (2) Prevents reflux and allows forward progression of ethylene vinyl alcohol (EVOH) copolymer into nidus. (3) Can be applied in peripheral AVMs whenever ethylene vinyl alcohol (EVOH) copolymer is used as the embolic agent.

### OC3.8

#### Safety and Efficacy of Vascular Closure Devices in Antegrade Femoral Intervention: A Single Center Experience

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