

study was to evaluate the technical success of the percutaneous retrograde access procedure after failed antegrad recanalization in Thromboangiitis Obliterans (Buerger's Disease) patients. **Method(s):** Thirteen consecutive patients (12 men, 1 women, mean age: 40.3 ± 5.6 years) and 14 arteries underwent retrograde puncture for recanalization with a diagnosis of TAO (Thromboangiitis Obliterans), between April 2015 and December 2018. After unsuccessful attempts using the antegrade approach, retrograde puncture were used under ultrasound and fluoroscopic guidance. Ipsilateral retrograde access was attempted in three patients with SFA (superficial femoral artery) in three patients with PTA (posterior tibial artery), in two patients with PEA (peroneal artery) and in five patients ATA (anterior tibial artery). The primary purpose of the study was to evaluate the technical success of the procedure in obtaining the ability to pass the wire across target artery and providing blood flow to the below the knee arteries. **Result(s):** Technical success was achieved 12 of 13 arteries (92.3%). In a patient who underwent PTA puncture, the retrograde approach failed because the guidewire could not be passed through the occlusive artery. There were no major complications in any of the cases. **Conclusion(s):** Endovascular treatment is a technically feasible and potentially effective treatment modality for Buerger's disease. Retrograde interventions in TAO patients may improve technical success and clinical improvement, especially in cases where antegrade approach fails.

C 3.14

Radiation Exposure During Varicocele Embolization: Does Access Site and Treated Side Matter?

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Background: This study aims to evaluate radiation exposure during varicocele embolization and correlate it with access site and embolized side. **Method(s):** This retrospective study included 39 patients who underwent varicocele embolization between Jan 2015 to Dec 2018. Embolization was done in all cases using a combination of coils and sclerosing agents in Sandwich technique. Bilateral embolization was done in 13 patients, while only the left side was embolized in 26 patients. Jugular vein access was used in 10 patients, while the brachial and basilic veins were used in 14 and 15 patients, respectively. Dose area product (DAP) and total fluoroscopy time were collected and correlated to the treated side and access. Statistical analysis was done on (StatPlus:mac, AnalystSoft Inc., Version v6) using wilcoxon and kruskal-wallis tests. **Result(s):** The mean fluoroscopy time for left varicocele embolization was 26.76 minutes (8.23 minutes – 49.6 minutes), which was not statistically different ($p=0.16$) compared to bilateral embolization mean fluoroscopy time of 33.2 minutes (10.3 minutes – 58.83 minutes). There was no statistical difference ($p=0.37$) between the mean DAP for left varicocele embolization of 106239 mGy.cm^2 (12672–590429) compared to bilateral DAP of 107153 mGy.cm^2 (29593–257259). There was no significant difference ($p=0.22$) between the mean DAP when using different vascular access (Brachial, DAP= 149416 mGy.cm^2), (Jugular, DAP= 87569 mGy.cm^2) (Basilic, DAP= 79179 mGy.cm^2). However, the basilic vein access was correlated with significantly shorter mean fluoroscopy time of 22 minutes (8.97

minutes – 42.5 minutes) compared to brachial vein (32 minutes, 8.23 minutes – 58.83 minutes) and jugular vein (34 minutes, 8.3 minutes – 49.6 minutes) with a p-value of 0.0429. **Conclusion(s):** The choice of vascular access may help in reducing fluoroscopy time during varicocele embolization, without significant difference between left or bilateral embolization. This reduction in fluoroscopy time did not translate into significant difference in DAP, which indicates the need for stricter radiation precautions such as collimation and less angiographic exposures.

OC3.15

Embolization of Procedures-Related Upper Gastrointestinal Bleeding: A Systemic Review

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Background: Procedure-related upper gastrointestinal bleeding considered as a rare cause of upper gastrointestinal bleeding (UGIB). In this presentation, we will review the most common procedures related UGIB with emphasis on endovascular role in diagnosis and treatment. **Method(s):** From 2001 to 2017 data, representative cases of procedure-related upper gastrointestinal bleeding were collected with their management details. **Result(s):** There are various categories of procedure-related upper gastrointestinal bleeding; Endoscopic mucosal resection / submucosal dissection, endoscopic ultrasound (EUS)-guided Intervention, percutaneous gastrostomy, and hepatobiliary procedures such as PTBD or ERCP. It presented as hematemesis, melena, or hemobilia which is associated with hepatobiliary intervention. In most cases the bleeding resolved spontaneously and, of those that did not, the majority responds to conservative management or endoscopy. Endovascular intervention was mainly embolization and stent graft insertion. **Conclusion(s):** In failed endoscopic treatment due to massive bleeding or in case of hemodynamically unstable patients or in hepatobiliary procedure related bleeding, endovascular intervention should be considered. Endovascular embolization represents the most viable treatment option regarding it is less invasive and not associated with complication of general anaesthesia.

OC4.1

Duplex-Ultrasound Guided Percutaneous Management of Pseudoaneurysm of Branch of Visceral Artery

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Background: To describe the role of Duplex-Ultrasound Imaging (DUI) for diagnosis of pseudoaneurysm (PSA) of a branch of offending visceral artery (b-OVA) followed by DUI-guided percutaneous embolization. **Method(s):** 46 patients were referred to us for the management of intractable renal hematuria. 21 cases had PSA after nephrolithotomy. 12 cases had PSA after guided renal biopsies. 6 cases had PSA following road-traffic accident. 2 cases of the tuberosus-sclerosis-complex developed PSA. 3 cases of arterio-venous and 2 cases of arterio-calyceal fistulae had