#### Abstracts

#### P437

## Interventional Radiology Awareness Among Final-Year Medical Students in Riyadh: 5 University-Based Cross-Sectional Study

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Background: Interventional Radiology was born in 1964 thanks to the efforts of Charles Dotter. Today, Interventional radiology is an ever-expanding field of medicine that incorporates a wide array of minimally-invasive, image-guided procedures with both diagnostic and therapeutic properties. However, there exists a glaring ambiguity about the role of the Interventional Radiologist. This, in part, is due to the overlap between Interventional radiology and other specialties for procedures and administrative tasks. The confusion that this creates may sway medical students away from the field of Interventional radiology and could directly impact both recruitment of young exciting prospects, and the shortage of Interventional radiology practitioners. There is little to suggest from the medical literature about the knowledge of Interventional radiology among final-year medical students. However, there are a handful of studies, all of which conclude that the majority of final-year students lack even the basic knowledge of Interventional Radiology. Method(s): We will be running a cross-sectional, self-administered questionnaire at 5 universitybased medical schools in the Riyadh region targeting all final-year medical students. 285 potential participants have been recognized. Result(s): Results will be analyzed soon. Conclusion(s): We believe that IR will become a force to reckon with in the near future. The minimally-invasive nature of IR procedures has proven to be a safe alternative to conventional surgery. We feel with this study we can advance IR knowledge amongst pregraduate medical students and ultimately enhance IR recruitment, especially in the Gulf region.

### P438

## The Utility of Two-Dimensional Perfusion Angiography in Critical Limb Ischemia: A Single Center Experience

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Background: CLI is a combination of both decreased inflow to the foot (macrocirculation) and volume flow through the capillary bed (microcirculation) resulting in diminished oxygen concentration in the tissues. The goal of endovascular therapy in CLI is to recanalise the vessels to the foot, obtain better tissue perfusion, and to accelerate wound healing. 2D-PA is a new imaging algorithm to measure volume flow in the whole foot both in the macrocirculation and microcirculation utilizing data from plain old digital subtraction angiography. Method(s): A retrospective single-center study review of 21 patients from February, 2017 to August 2018 (mean age 84±42 years; 17 men, 8 women) with CLI who underwent lower limb digital subtraction angiography (DSA) A standardized contrast administration protocol was applied during DSA using a 2D

perfusion—enabled image intensifier. Representative hindfoot and forefoot regions of interest were analyzed, and representative numeric density values [time to peak (TTP), mean transit time (MTT) and area under the (time-density) curve (AUC)] were calculated using 2D perfusion—enabled angiographic software to assess foot perfusion. **Result(s):** The numeric density values (mean change in TTP (0.75 s), MTT (0.85 s) and AUC (1835.53)) were compared before and after angioplasty and by level of treatment and these parameters were correlated with disease severity (Fontaine Classification (III=8; IV=16). **Conclusion(s):** In our initial experience, 2D-PA is a useful tool in critical limb ischemia evaluation and treatment by providing objective measurements of microvascular perfusion during and following endovascular procedures. This helps determining both the end point and outcome of revacularisation.

#### P439

## **Sharp Recanalization of Chronic Venous Occlusions Utilizing Outback Re-Entry Device**

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Background: Chronic total venous occlusion of superior or inferior vena cava is increasingly encountered in daily practice. Several endovascular techniques including thrombolysis, percutaneous transluminal angioplasty (PTA), bare and covered metallic stents have been implemented to restore venous patency. Patients who fail standard recanalization techniques may require sharp recanalization procedures to reconstruct the chronically occluded segments. Several tools have been used to cross the occluded segments such as TIPS needles, trans septal needle, direct trans mediastinal needle puncture and radiofrequency wire. The use of re-entry devices in crossing chronic venous occlusions is seldom reported in the literature. Method(s): This educational poster will present few illustrative cases of the use of Outback re-entry device in recanalization of chronically occluded IVC and SVC with discussion of technical considerations. Result(s): This educational poster will present few illustrative cases of the use of Outback re-entry device in recanalization of chronically occluded IVC and SVC with discussion of technical considerations. Conclusion(s): Sharp recanalization of chronic venous occlusions utilizing Outback re-entry device is a safe and reliable way to cross the central occlusion with good success rate.

#### P440

# **Unusual Cases of Gastrointestinal Hemorrhage Managed in Interventional Radiology**

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**Background:** in this poster we report and illustrate 2 cases of very rare GI bleeding, one upper GI bleeding due to Esophago-mediastinal fistula secondary to mediastinal TB complicated by Mediastinal bronchial artery aneurysms which is treated by coils embolization, second case of lower GI bleeding due to secondary arterio-enteric