#### Abstracts

been excluded from cohort. 6 cases of intractable vaginal/uterine haemorrhage. Among these, a unique complex case presented with post-hysterectomy and in subsequent course of management, surgical ligation of anterior division of both iliac arteries and 5 cases presented after cesarian surgery/dilatation and curettage, 4 cases of post-traumatic G.I. Bleed due developed PSA of b-hepatic artery, 10 cases of pancreatitis induced PSA from b-GDA and splenic arteries. 5 cases of G.I. bleed had bowel tumours were excluded by CTA. Total 61 PSA of b-OVA were included. DUIguided-percutaneous-management (DPM) is a four-step process. Firstly, identification of PSA-sac of b-OVA. Secondarily, puncture of PSA-sac with 18 G puncture-needle under DUI. Subsequently, injection of gelfoam-slurry followed by NBCA-glue. Thrombosis of the PSA-sac was confirmed by absent flow on DUI during the procedure. Result(s): 60 PSA of b-OVA managed successfully and followed-up clinically, by DUI and CT-Angiography (if needed). A case of large sized (5x4 cm size) PSA of b-segmental-renalartery developed pulmonary-thromboembolism and managed endvascular coiling. Conclusion(s): DPM of PSA of b-OVA is safe, feasible and cost-effective modified embolisation management technique in a limited resources scenario.

#### OC4.2

Initial Experience with the Covera Covered Stent for the Treatment of Dysfunctional or Thrombosed Arterio-Venous Grafts a Retrospective Analysis of 43 Patients

Michail Theofanis, Panagiotis Kitrou, Panagiotis Papadimatos, Spyros Papadoulas, Evangelos Papachristou, Konstantinos Katsanos, Dimitrios Karnabatidis

Department of Diagnostic and Interventional Radiology, Patras University Hospital, Patras, Greece. E-mail: mixalistheofanis@hotmail.com

Background: To retrospectively evaluate the safety and effectiveness of the Covera covered stent (CS) for the treatment of dysfunctional or thrombosed arterio-venous grafts (AVGs). Method(s): Within 21 months (February 2016 – November 2017), 61 patients underwent CS placement in our department for the treatments of their dysfunctional AVGs. Data were available for 43 patients, undergoing 43 procedures, using 43 devices. Mean follow-up was 214 days (20-524 days). Lesion characteristics were as follows: 33 cases with venous-graft anastomosis (VGA) stenosis, 7 cases of puncture zone stenosis, 12 cases of in stentgraft (SG) stenosis, 5 cases of psuedoaneurysm treatment. Twenty-six patients presented with thrombosis while 26/43 case were restenotic lesions. Primary outcome measure was target lesion primary patency (TLPP) at six months, while secondary outcome measures included factors influencing primary outcome. Result(s): Technical success was 100%. TLPP was 60.64% at six months (median TLPP 264 days). During the whole followup period 17 AVGs were thrombosed and 11 cases required a redo procedure. There was no significant difference in terms of TLPP when de novo lesions were compared with restenotic, in SG restenosis vs. non in-SG stenosis, patients presented or not with thrombosis, or whether lesion was placed in the puncture zone or in VGA. A significant difference was observed between cases presented with thrombosis after treatment vs. those that

were not thrombosed (133 vs. 285 days respectively. p=0.007). **Conclusion(s):** Use of the Covera CS for AVG treatment is safe and effective in every case presented in this retrospective analysis.

## **OC4.3**

**Endoluminal Stenting for Acute Obstructing Colonic Cancer** 

Balamurugan Rathinavelu, Shahabazali Patil, Shamsa Abdalla Alraeesi, Salem Nasser Al Harthi, Ateq Ali Al Messabi, H. Alzarooni, S. Alsheebani

Mafaraq Hospital, Abu Dhabi, UAE. E-mail: brathinavelu@seha.ae

Background: Colorectal cancer is a common disease and up to 30% of colon cancers present as emergency. The elective surgery mortality rate is 3.5 to 5 % whereas emergency surgery, morbidity is 40% and mortality 15%. The objective of the study is to assess our colonic stenting experience and compare it with available International published data, advantage of colonic stenting in acute setting and improve treatment quality provided at our hospital. Method(s): Retrospective data collection using Cerner system from 2016 to Oct 2018. Inclusion criteria: Patients with left sided colonic adenocarcinoma coming to emergency department of our hospital with acute colonic obstruction. Patient records were analysed for demographic data, procedure indication, procedural details, outcome, screening time, hospital stay, complications. Result(s): Emergency admission with obstructing left sided colorectal cancer = 12; 5 underwent emergency diverting colostomy (Group 1) and 7 underwent colonic stenting (Group 2). Mean age was 66.5 and 60.5 respectively. There was no major complication in colostomy group, whereas 1 technical failure in stent group. Mean length of hospital stay was 13.5 days (colostomy group) and 1-3 days (stent group). Mean length of ICU stay was 2 days in group 1 whereas no ICU admission required in group 2 patients. Conclusion(s): Advantage of Colonic Stenting: (1) Combined procedure colonoscopy and IR. This gives reduced radiation dose due to reduced screening time. (2) Biopsy of the lesion can be performed at the same time. (3) Convert emergency to elective surgery. (4) Reduction of surgery related complications. (5) Reduced ICU and overall hospital stay. (6) Major surgery may be avoided for patients with end stage disease and unstable comorbid disease. (7) Better quality of life quality.

## **OC4.4**

Aspiration Thrombectomy for Acute Limb Ischemia: A Single Center Experience

Maria Antonella Ruffino, Maria Antonella Ruffino, Marco Fronda¹, Andrea Discalzi, Andrea Mancini, Pierluigi Muratore, Denis Rossato, Dorico Righi, Paolo Fonio¹

Department of Diagnostic Imaging and Radiotherapy, Vascular Radiology, A.O.U. Citta della Salute e della Scienza di Torino, 
<sup>1</sup>Department of Surgical Sciences, Radiology Unit, University of Torino, Torino, Italy.

E-mail: mariaantonellaruffino@gmail.com

Background: Acute lower-extremity ischemia (ALI) is associated with high in-hospital amputation rates of 10%-30%, 1-year mortality rates of 15%-20%, and low amputation-free survival rates of 50%-65%. Although catheter-directed thrombolysis (CDT) is associated with a lower morbidity rate and is as effective as surgery for stage I and IIa ALI, it takes substantial time to be effective. The Indigo System (Penumbra, inc) is designed for aspiration thromboembolectomy available from 3 f to 8 f in size. The size-matched "separator" allows the catheter to be cleared of occlusive material without catheter removal from the area of thrombus. It has a pump-driven vacuum for consistent aspiration.r preliminary results of this device in the treatment of ali have been recently published. We want to report our single center experience with percutaneous aspiration thrombectomy (pat) as a first line treatment for acute lower limb ischemia (ALI). Method(s): Twenty-one patients who underwent pat for ali from March 2017 to June 2018 were included. The primary end-point was complete thrombus aspiration with return to patency of the target vessel. Adjunctive treatment for underlying stenosis or occlusion was not considered indicating technical failure, while the use of additional treatment for thrombus removal was considered as a technical failure. Result(s): The technical success was obtained in 18/21 patients (85.7%); 2 of the remaining 3 patients required additional treatment for thrombus removal and in 1 the pat failed to restored patency and the patient underwent open surgical treatment. No complications related to pad were reported. Conclusion(s): The technical success was obtained in 18/21 patients (85.7%); 2 of the remaining 3 patients required additional treatment for thrombus removal and in 1 the pat failed to restored patency and the patient underwent open surgical treatment. No complications related to pad were reported.

## **OC4.5**

Angiographic Anatomy of Prostatic Arteries in 168 Patients Undergoing Prostate Artery Embolization for Benign Prostatic Hyperplasia

## Mohamed Shaker, Essam Hashem, Ahmed Okba, Karim Abd El Tawab

Ain Shams University, Cairo, Egypt. E-mail: mohamedshakerghazy@yahoo.com

Background: Prostatic artery embolization (PAE) has been established as a safe and effective treatment option for symptomatic benign prostatic hyperplasia. Thorough knowledge of detailed prostatic artery (PA) anatomy is essential to guarantee technical success and to avoid potential complications of nontarget embolization. We aim to provide a pictorial review of PA and prevalence of each anatomical variant, in addition to important anatomical considerations, extracted from our case series. Method(s): We performed PAE on 168 consecutive patients until 2019. The most commonly used tools were 5-French cobra-head angiographic catheter and 2.7-French microcatheter. Images were analyzed by the operators. Result(s): In the 168 patients, 331 PAs were angiographically identified. Double arterial supply on the same side was noted in 9 patients (5%). In 10 patients (6%), only a unilateral PA was identified. No PA could be identified in 2 patients (1%). The frequencies of origins of PAs were found to be as follows: 133 (40%) from superior vesical artery (SVA), 97 (29%) from internal pudendal artery (IPA), 70 (21%) from obturator artery, 29 (9%) originated directly from anterior division

of internal iliac artery and only 2 (<1%) originated from inferior gluteal artery. Contrast filling of contralateral PA main trunk was identified in 31 patients (18%). Penile anastomosis was identified with 28 PAs (8%) and rectal anastomosis was observed with 14 PAs (4%). **Conclusion(s):** PA has variable origins, even for both sides in the same patient. Knowledge of its detailed anatomy and anastomosis with nearby arteries is essential for safe and timely performance of PAE.

## **OC4.6**

Safety and Efficacy of Endovascular Revascularization of Single Patent Arch Artery in Patients with Takayasu Arteritis: Short Term Results

## Priya Jagia, Niraj Pandey

All India Institute of Medical Sciences, New Delhi, India. E-mail: drpjagia@yahoo.com

Background: Takayasu arteritis is a form of large vessel vasculitis commonly affecting the aorta and its major branches. Steno-occlusive lesions of all arch vessels can cause severe neurologic symptoms. There is paucity of literature regarding the role of endovascular revascularization in such cases. The present report describes immediate and short term follow-up results with plain balloon angioplasty of severely stenosed single patent arch arteries. Method(s): Angioplasty was performed in 5 consecutive patients with Takayasu arteritis (age, 22 - 50 years; mean,  $31.0 \pm$ 12.0416 years) with cerebrovascular symptoms caused by severe stenotic lesions of arch (ie, carotid, vertebral, brachiocephalic and 1st part of subclavian proximal to vertebral take-off) arteries. Result(s): Angioplasty was attempted in 8 stenotic lesions: vertebral (n=3), carotid (n=1), brachiocephalic (n=2) and 1st part of subclavian artery (n=2). Five lesions were discrete and three were diffuse. Balloon angioplasty was performed successfully in all patients. Improvement of luminal diameter from 1.625 mm  $\pm$  0.5825 mm to 4.75 mm  $\pm$  0.8452 mm (P < .0001), and the reduction in diameter of stenosis from  $73.125\% \pm 14.1263\%$ to  $16.25\% \pm 8.3452\%$  (P < .0001) was observed. No immediate procedure-related complication or significant neurologic deficits occurred. The presenting symptoms improved in all patients. On short term follow-up of upto 4 months, none of the patients had recurrence of neurologic symptoms. Conclusion(s): Plain balloon angioplasty of a sole patent arch artery in Takayasu arteritis is safe and effective, and provides excellent symptomatic relief in such patients.

### **OC4.7**

Glue Embolisation of Truncal Varicosities with Direct Puncture Technique: Is it a Threat to Thermal Ablation? A Prospective Study

# Venkatesh Kasi Arunachalam, Rinoy Anand, Santosh Patil, Elango, Jenni

KMCH, Coimbatore, Tamil Nadu, India. E-mail: drkasivenkatesh@yahoo.co.in

**Background:** Varicose veins is one of the most common disease presented to vascular clinic. Though there are many endovascular methods are available for the treatment of variocse veins, most of them are costly procedures. we need a treatment with lower