Background: A 40-year-old male presented with progressive left lower limb pain on a background of left knee surgery some 20 years prior. Examination revealed a thrill and bruit in the left popliteal fossa and diagnostic angiography confirmed a large arteriovenous fistula (AVF). **Methods:** Over-the-wire Fogarty catheter was used to exclude flow through the AVF and image run-off vessels. The native popliteal artery measured 6.5 mm above and below the fistula and an 8 mm × 50 mm Gore Viabahn covered stent was used to exclude the AVF with good results. The patient was started on clopidogrel and therapeutic anticoagulation with warfarin postoperatively. **Results:** This case illustrates the endovascular repair of a large, chronic AVF in which open surgery would have been very challenging. The majority of data on long-term primary patency of popliteal covered stents results from aneurysm treatment and is estimated to be 69.4% at 5 years. **Conclusion:** Treatment of chronic AV fistulas using covered stents in the popliteal region is a viable alternative to open repair.

OC111

Long-Term Primary Patency Rate After Nitinol Self-Expandable Stents Implantation in Long Totally Occluded Femoropopliteal (TASC II C and D) Lesions (Retrospective Study)

Mahmoud Farouk Elmahdy

Cairo University, Cairo, Egypt.

E-mail: drmahmoudfarouk@yahoo.com

Background: Endovascular therapy for long femoropopliteal lesions using percutaneous transluminal balloon angioplasty or first-generation of peripheral stents was associated with unacceptable 1-year restenosis rates. However, with recent advances in equipment and techniques, a better primary patency rate is expected. Hence, this study was conducted to detect the long-term primary patency rate of nitinol self-expandable stents implanted in long totally occluded femoropopliteal lesions (TASC II type C and D) and determine the predictors of reocclusion or restenosis in the stented segments. **Methods:** The demographics, clinical, anatomical, and procedural data of 213 patients with 240 *de novo* totally occluded femoropopliteal (TASC II type C and D) lesions treated with nitinol self-expandable stents were retrospectively analyzed. Of these limbs; 159 (66.2%) presented with intermittent claudication, whereas 81 (33.8%) presented by critical limb ischemia. The mean time of follow-up was 36 ± 22.6 months (range: 6.3–106.2 months). Outcomes evaluated were primary patency rate and predictors of reocclusion or restenosis in the stented segments. **Results:** The mean age of the patients was 70.9 ± 9.3 years, with male gender 66.2%. Mean preprocedural ankle-brachial index was 0.45 ± 0.53 . One hundred and seventy-five (73%) lesions were TASC II type C, whereas 65 (27%) were type D lesions. The mean length of the lesions was 17.9 ± 11.3 mm. Procedure-related complications occurred in 10 (4.1%) limbs. There was no periprocedural mortality. Reocclusion and restenosis were detected during follow-up in 45 and 30 limbs, respectively, and all were retreated by endovascular approach. None of the patients required major amputation. Primary patency rates were $81.4\% \pm 1.1\%$, $77.7\% \pm 1.9\%$, and $74.4\% \pm 2.8\%$ at 12, 24, and 36 months, respectively. Male gender, severe calcification, and TASC II D lesion were independent predictors for reocclusion, while predictors of restenosis were DM, smoking, and TASC IID lesions.

Conclusion: Treatment of long totally occluded femoropopliteal (TASC II C and D) lesions with nitinol self-expandable stents is safe and is associated with highly acceptable long-term primary patency rates.

OC201

Biliary Culture Analysis Obtained During Percutaneous Biliary Intervention: A Multicenter Analysis – Are we Treating Biliary Sepsis with the Correct Antibiotics?

Pavan Najran, Jon Bell

The Christie Hospital NHS Foundation Trust, Manchester, UK.

E-mail: pnnn@doctors.org.uk

Background: A multicenter retrospective analysis of the pathogens isolated from biliary cultures in patients treated with percutaneous transhepatic intervention. To assess of the pathogen profile and antibiotic sensitivity to decipher the most appropriate treatment regimen. **Methods:** All percutaneous transhepatic interventions performed over a 2-year period in three separate centers were reviewed retrospectively. Those where no biliary culture was obtained were excluded from the study. Analysis of the culture results including pathogens grown and antibiotic sensitivity was performed. **Results:** A total of 104 patients were included in the analysis, 58 from center 1, 13 from center 2, and 33 from center 3. No pathogens were grown in 15.3% of cultures ($n = 16$). Of those with positive cultures ($n = 88$), enterococci and *Pseudomonas* were the most common pathogens grown in 52.3% of cases ($n = 46$). Ciprofloxacin and vancomycin were equally the most sensitive antimicrobials demonstrating sensitivity in 27.3% ($n = 24$) of positive cultures. Gentamycin was the fifth most sensitive antimicrobial demonstrating sensitivity in 20.5% ($n = 18$). **Conclusion:** Over the three centers included in the analysis, there is no common antimicrobial administered before percutaneous biliary intervention. In center 1, gentamycin is administered prophylactically; this study has demonstrated that this is comparably ineffective with low sensitivity and high resistance requiring a change in protocol. Effective antibiotic prophylaxis requires knowledge of likely pathogens and procedure-specific infection risks. However, the choice of antimicrobial is dynamic given the ability of antibiotic resistance to eliminate historically effective regimens.

OC202

Mechanical Thrombectomy within 6 h after Symptom Onset in Ischemic Stroke

**Afra Sultan Muesem Alfalahi,
Ayman Atmaz Alsibaie, Ahmad Saadat,
Hamda Ahmad Kamalboor**

Rashid Hospital, Dubai, UAE.

E-mail: a.s.maisem@gmail.com

Background: Acute stroke consequence results on a heavy burden over affected society members ranging from physical disability, health-care resources, and financial support required. The aim of the study is to assess the clinical outcome postmechanical thrombectomy with or without intravenous (IV) or intraarterial tissue-plasminogen activator (t-PA) for the treatment of acute stroke. **Methods:** During a 3-year period at single center in

Dubai, UAE, a total of 40 patients who could be treated within 6 h after the onset of symptoms of acute ischemic stroke to receive either medical therapy (including IV or intraarterial alteplase when eligible) and endovascular therapy with a stent retriever (thrombectomy group) or medical therapy alone (IV t-PA) (control group). All patients had confirmed proximal anterior circulation occlusion and the absence of a large infarct on neuroimaging. The primary outcome was the severity of clinical disability at 72 h and at the time of discharge, as measured by the National Institutes of Health Stroke Scale score and modified Rankin scale. **Results:** Thrombectomy reduced the severity of disability over the range of the National Institutes of Health Stroke Scale score and modified Rankin scale. **Conclusion:** Among patients with anterior circulation stroke who could be treated within 6 h after symptom onset, stent retriever thrombectomy reduced the severity of poststroke disability and increased the rate of functional independence.

OC203

Endovascular Management of Complex Wide-Neck Intracranial Aneurysms: Rashid Hospital Experience of the Current Day Armamentarium at Our Hands!

Yasir Jamil Khattak, Ayman Al Sibaie

*Rashid Hospital, Dubai, UAE.
E-mail: dryasirjamil@gmail.com*

Background: Subarachnoid hemorrhage due to ruptured cerebral aneurysm is a disastrous event accounting for approximately 5%–15% of all stroke cases and has a mortality rate of 20%–40%. There has been a radical change in the management of intracranial aneurysms during the past decade. Endovascular approach is now considered as the management of first-choice over surgical means; however, it has its limitations with respect to wide-neck aneurysms. We present the results of our experiences of using assisted techniques for wide-neck aneurysms, with an emphasis on potential applications, technical aspects, and associated complications. **Methods:** A retrospective review was performed to identify all cases from 2010 to 2017 performed at our institution in which assisted techniques of aneurysm embolization were employed. Demographic data including age, gender, vascular risk factors, and comorbidities were collected. Angiographic data were collected regarding the location, size, and shape of the aneurysms and whether they were ruptured or unruptured. Angiographic occlusion results were evaluated and classified according to the Raymond-Roy Scale. Data regarding devices used were evaluated in relation to the aneurysm. **Results:** A total of 133 aneurysms in 119 subjects were embolized at our institution from 2010 till 2017 with 67 wide-neck aneurysms having a mean aspect ratio (maximum width of dome/width of neck) of 2.07. Eighty-one percent of patients presented with subarachnoid hemorrhage. Assisted techniques were employed in 63% of the cases. Eighty-seven percent of the wide-neck aneurysms were located in anterior circulation, while 13% belonged to posterior circulation. Complete occlusion (Raymond-Roy Occlusion Class 1) was achieved in 85% of cases. **Conclusion:** The data from Rashid hospital add to the growing evidence that assisted techniques are safe, effective, and necessary when embolizing wide-neck intracranial aneurysms. Further rigorous clinical evaluation of all techniques and devices is required to precisely assess their safety and efficacy in the management of wide-neck aneurysms.

OC204

Treatment of Iatrogenic Peripheral Pseudoaneurysms

Saurabh Anant Joshi, Vivek Ukirde, Ashank Bansal, Ajit Patil, Abhijit Soni, Maunil Bhuta

*Lokmanya Tilak Municipal Medical College, Mumbai, India.
E-mail: saurabhanantjoshi@gmail.com*

Background: Pseudoaneurysms are known complications of few invasive procedures, puncture site aneurysm after angiography, postjoint replacement surgery, etc. They are amenable to less invasive endovascular management, compared to open surgical approach. We present a series of 14 cases of pseudoaneurysms treated in our institute. **Methods:** Fourteen iatrogenic pseudoaneurysms were referred to our department in the past 2 years. Ten were postangiography arising from common or superficial femoral artery, two were postjoint replacement surgery, one in popliteal and femoral artery each, and 2 were involving brachial arteries, in dialysis patients in which artery was punctured in place of fistula vein. After initial ultrasonographic evaluation, sonography-guided compression was attempted in all. Four responded and 10 patients needed endovascular intervention. In one patient, pseudoaneurysm was arising from a branch of profunda femoris artery which was embolized using glue and coils. In remaining nine patients, the rent was in a major artery. In seven patients, balloon was kept in artery across the neck of pseudoaneurysm to occlude the flow in the pseudoaneurysm and percutaneous thrombin was injected. In one patient, complete thrombosis was not achieved by this treatment. In remaining two patients and in one who did not respond to percutaneous thrombin, a stent graft was deployed across the rent in the artery to close off the pseudoaneurysm. **Results:** All 14 patients were successfully treated, 4 by ultrasonography-guided compression and 10 by endovascular intervention. Balloon occlusion with percutaneous thrombin was done in seven patients and was adequate for six patients. Embolization with glue and coils was done in one patient in which the pseudoaneurysm was from a small branch. Three patients needed placement of stent graft. **Conclusion:** Interventional radiology offers various methods to successfully treat iatrogenic pseudoaneurysms in completely noninvasive or minimally invasive ways.

OC205

Planning for Yttrium-90 Selective Internal Radiation Therapy: A Primer

Omar Bashir, Mohammed Arabi, Shahbaz Qazi, Yousof Al Zahrani, Muhammad Almoaiqel, Refaat Salman

*King Abdulaziz Medical City, Riyadh, Saudi Arabia.
E-mail: drobashir@gmail.com*

Background: Hepatocellular carcinoma (HCC) is one of the leading causes of cancer deaths worldwide. Yttrium-90 selective internal radiation therapy (Y-90 SIRT) has emerged as an effective treatment option for patients with intermediate and advanced HCC. The procedure involves delivery of glass or resin particles loaded with Y-90 into hepatic arteries supplying HCC. While a high radiation dose is delivered to the hepatic tumor, the adjacent hepatic parenchyma which is supplied preferentially by the portal