Article published online: 2021-04-26

more than 50% decreased size of 4 of 9 cases (44.4%) and less than 50% decreased size in 5 of 9 cases (55.5%). **Conclusion:** Endovascular embolization of cerebral AVMs by transfemoral artery approach using microcatheter navigation and embolization has some technical difficulties with success rate for navigation and embolization (64%). It is an effective treatment method to control hemorrhagic cerebral AVMs, to decrease associated seizures, and to decrease the size of cerebral AVMs.

P305

Mechanical Thrombectomy in Acute Stroke: A Single-Center Cohort Study

Afra Alfalahi, Khaled Mahmoud, Suhail Alrukun, Habib Kamran, Ahmed Bedair, Abdulla Husein, Usama Albastaki, Ayman Alsibaie

Rashid Hospital and Trauma Center, Dubai Health Authority, Dubai, United Arab Emirates.
E-mail: a.s.maisem@gmail.com

Objectives: The study purpose is to evaluate the clinical outcomes of mechanical thrombectomy in acute stroke management regardless the administration of intravenous or intra-arterial tissue plasminogen activator. **Methods:** We retrospectively reviewed medical records of the patients from 2014 to 2019 at our single center in Dubai, UAE. A total of 150 patients who underwent mechanical thrombectomy for acute ischemic stroke were identified. The mechanical thrombectomy was performed within 6 h after the onset of stroke symptoms. Both stent retriever and/or thrombus aspiration techniques were used. Patients who have been treated with or without intravenous or intra-arterial alteplase were included also. All patients were confirmed to have proximal anterior circulation occlusion. Patients with large infarct on neuroimaging (ASPECT score 6 or more) were excluded from the study. The primary endpoint was to assess the severity of clinical disability at 72 h and at the time of discharge using the National Institutes of Health Stroke Scale score and modified Rankin scale. **Results:** This is an ongoing study with preliminary results showing that mechanical thrombectomy reduced the severity of disability over the range of the National Institutes of Health Stroke Scale score and modified Rankin scale. **Conclusion:** Mechanical thrombectomy has reduced the severity of poststroke disability and increased the rate of functional independence.

P306

Complication or Neurovascular Interventions and How to Treat Them

Enrique Montes

Hospital Universitario Marques de Valdecilla, Santander, Spain.
E-mail: montesf@live.com

Educational Poster Background: Recent studies have reported a high prevalence of cerebral vascular malformations in the general population; further, stroke is the fifth leading cause of death in the United States. Endovascular therapies are used with increasing frequency for the treatment of these patients. For this, it is fundamental to consider the complications that can be seen after endovascular interventional modalities. As the number of endovascular interventions increases, periprocedural complications become more common. These complications can be serious and often lead to prolong stays in the intensive care units, delay rehabilitation, and increase morbidity. This main complications are:

- Subarachnoid hemorrhage is a common complication, usually caused by rupture treated vessel
- Distal embolization of occluded plaque, new emboli in another location, and vasospasm or reocclusion
- Intracranial artery dissection
- Arteriovenous fistula results from a direct vessel perforation.
- Puncture site complications, such as pseudoaneurysm, hematoma, or dissection.
- Migration of the embolization material distal or to systemic circulation.

The treatment with endovascular procedures is used more and more frequently, and in some instances, it is the only option available for certain situations. That is why it is important to know the fundamental elements about these procedures as well as the complications that these entail and, above all, how to treat them using the different image tools.

1. To describe basic concepts of the different neuroendovascular procedures and how to evaluate their results by image.
2. To evaluate the most common complications after neuroendovascular interventional treatments and discuss these findings describing diagnosis keys.

P401

Fluoroscopic-Guided Self-Expandable Retrievable Esophageal Stent Application in the Management of Postbariatric Surgery Anastomotic Leaks

Karim Ahmed, Karim Ahmed Abd El Tawab, Nadine Mohamed, Hend Gamal Abdelgali, Karim Ahmed, Noha Abdulrahman, Mahmoud Mustafa Mohamed, Mark Michael, Ahmed Zahran

Ain Shams University, Cairo, Egypt.
E-mail: karimabdeltawab@gmail.com

Objectives: Anastomotic leakage is a major complication of bariatric surgeries that can lead to high mortality and morbidity. Depending on the clinical presentation, management options include conservative management with or without external drainage, stenting, or surgical re-intervention which carries relatively high morbidity and mortality rates. **Methods:** Self-expanding silicon stents were inserted under fluoroscopic guidance in 16 patients with radiologically diagnosed anastomotic leakage; nine of them postbariatric gastric bypass operation and seven patients after laparoscopic sleeve. Patients were referred for stenting between 7 and 26 days (mean 14 days) after surgery. Balloon repositioning was needed twice in one patient distal migration. The stent was left for 8 weeks in all patients. The patients were following a strictly fluid diet to avoid stent migration. Stents were removed endoscopically. All patients were followed till removal of the stents. **Results:** A 100% technical success was achieved defined as successful positioning of the stent bypassing the leakage. Distal migration occurred twice in the same patient with balloon repositioning. Persistence of the leakage after stent removal took place in seven patients (all

were referred late 20 days plus postsurgery), six of which had re-surgery and one patient who had residual tubular cutaneous-anastomosis fistula had track coiling with cessation of leakage. **Conclusion:** Fluoroscopic-guided esophageal stenting might be effective in bypassing anastomotic leakages following bariatric surgeries; however, it should be considered as soon as significant leakage is diagnosed and should be considered before resurgery. Placement of the stents was feasible without major procedure-related complications.

P402

The First Masters of Science in Interventional Radiology Training Program in Africa: Year 1

Fabian Max Laage Gaupp, Erick Michael Mbuguje[1], Ivan Rukundo[1], Azza Naif[1], Minzhi Xing[2], Nadia Solomon[3], Lulu Fundikira[4], Flora Lwakatare[4], Frank Minja, Janice Newsome[2]

Yale New Haven Hospital, Yale School of Medicine, New Haven, [2]Emory University, Atlanta, [3]Icahn School of Medicine at Mount Sinai/Elmhurst Hospital Center, New York, [1]Muhimbili University of Health and Allied Sciences, [4]Muhimbili National Hospital, Dar es Salaam, Tanzania.
E-mail: fabian.laage-gaupp@yale.edu

Objectives: Over four billion people around the world do not have access to interventional radiology (IR), rendering a broad range of life-saving procedures inaccessible. Our objective was to challenge the notion that IR does not play a role in the developing world. Over the past year, we built the first IR training program in East Africa and were training three IR fellows per year in a two-year Master of Science in Interventional Radiology curriculum. **Methods:** Every month, a teaching team consisting of an IR attending, nurse, and technologist travel from North America to Tanzania to train local residents, nurses, and technologists. All consultations, preprocedure information, procedures, and follow-up at 1 and 3months are recorded via Research Electronic Data Capture, a Health Insurance Portability and Accountability Act compliant workflow application. **Results:** A total of 231 procedures were performed by the newly established IR service from October 2018 to November 2019, the majority of which were nonvascular interventions (88%). All procedures were performed by the Tanzanian IR fellows as primary operators under the supervision of visiting faculty. The vast majority of the procedures were technically successful (99%) and uncomplicated (94%), while few (6%) were associated with minor complications (SIR class A and B) and one was associated with a more significant complication (SIR class C). The distribution of nonvascular IR procedures performed over the 1st year is outlined in Figure 2. **Conclusion:** We have demonstrated that establishing an IR training program in the resource-limited setting is safe and feasible. There is an urgent need for expansion of such training programs to other developing nations to make IR available to a broader population.

P403

Management of Intrahepatic Ductal Stones with or without Previous Biliary-Enteric Anastomosis, Single-Center Experience from the UAE

Shahabazali Patil, Balamurugan Rathinavelu, Asiya Maheen Khan, Vijay Papineni

Mafraq Hospital, Abu Dhabi, United Arab Emirates.
E-mail: shahbazpatil@hotmail.com

Objectives: We looked at the results of operative and nonoperative management of the intrahepatic ductal stones. **Methods:** We did a retrospective study of clinical and radiological records of patients with intrahepatic bile duct stones who underwent treatment by operative or nonoperative therapy. Of 11 patients with hepatolithiasis at our center, 90% were male (n = 10). All underwent follow-up after operative (n = 9), percutaneous transhepatic cholangiogram (PTC) (n = 11), biliary balloon dilatation (n = 3), or serial biliary drain upsizing (n = 6) treatment. **Results:** Complete stone clearance was attained in 90% of the patients. Median follow-up period was 23 months (up to 4.5 years). We noted stone recurrence in two patients. Zero mortality rate and no cholangiocarcinoma were seen. Failure of attempted primary PTC was seen in two cases which were successful in the second attempt. **Conclusion:** Our long-term follow-up study showed a combined approach of operative and nonoperative procedures in the management of intrahepatic bile duct stones and their related complications.

P404

Everything Begins with an Idea

R. S. Brijesh Ray, Manish Kumar Yadav, Rohith P. V. Nair[1]

KIMS Hospital, Thiruvananthapuram, [1]Aster Medcity, Kochi, Kerala, India.
E-mail: drleoray10@gmail.com

Objectives: To demonstrate the role of magnetic resonance imaging (MRI) on identifying the location of cisterna chyli and its successful percutaneous cannulation and embolization of the thoracic duct. **Methods:** A prospective review of 10 patients was conducted to assess the efficacy of MRI in identifying the location of cisterna chyli and its successful percutaneous cannulation and embolization of the thoracic duct leak caused by thoracic surgeries. **Results:** A total of 10 patients presented with chylothorax from 2016 to 2019 in two hospitals, KIMS Hospital and Aster Medcity. Treatment options of surgical thoracic duct ligation and embolization were considered in all cases. In view of recent surgery, all patients decided for percutaneous interventions. The cisterna chyli was accessed as demonstrated by the MRI using a heavily T2-weighted sequence using bony landmarks/ultrasonography guidance by a 21G China needle. After successful puncture of cisterna chyli, a 014-inch guide wire was passed and a braided microcatheter was threaded into the thoracic duct. Leak was demonstrated in seven patients while leak was not demonstrated in three patients. All underwent embolization using NBCA diluted with lipiodol injected under fluoroscopic guidance. **Conclusion:** MRI using a heavily T2-weighted sequence is a valuable tool in the localization of cisterna chyli in thoracic duct embolization and saves significant time during the procedure as compared to conventional nodal or pedal lymphangiography, which takes significant time for the contrast to ascend up to the level of thoracic duct.