

of clinical onset of symptoms, CT/MR perfusion was also done and was taken for mechanical thrombectomy according to the DEFUSE 3 trial criteria. Good clinical outcome was defined as an improvement of 8 points on NIHSS or NIHSS score 0 at discharge or modified Rankin scale ≤ 2 at discharge or at 90 days. **Results:** We obtained good revascularization (treatment in cerebral infarction IIB/III) in 20 out of 25 patients. Out of these 20 patients, in nine patients, we were able to get successful revascularization with this first-pass aspiration technique. No procedural complications were witnessed in these patients with ADAPT. Procedure-related subarachnoid hemorrhage happened in two patients, and in both, the patients' stent retrievers were being used. **Conclusion:** ADAPT is an effective endovascular method of stroke treatment with short procedural time. It is also cost-effective with less procedure-related complications.

P302

Endovascular Treatment of Complex Distal Part Basilar Artery Aneurysms Using Different Techniques

Vitaly Kiselev, Rustam Gafurov, Alexey Sosnov, Artem Perfilov

*Federal Neurosurgical Center, Novosibirsk, Russia.
E-mail: scandr44@yahoo.com*

Objectives: Aneurysm of basilar artery (BA) bifurcation and the origin of superior cerebellar artery (SCA), united in the concept of the BA apex (BAA) aneurysms, along with the size of the aneurysm, is a predictor of the rupture. These lesions more often are challenging for microsurgery. Intervention techniques are more favorable, but the vascular anatomy of this localization requires a careful selection of the endovascular occlusion method. **Methods:** Between 2016 and 2018 in the neurovascular department, 69 patients with aneurysms of the distal part of BA (dBAA) were operated. There were 15 (21.7%) men and 54 (78.3%) women. The average age of the population was 51.5 years (range, 25–74 years). There were 48 (69.6%) aneurysms on the basilar tip and 21 (30.4%) on the SCA. Most of the aneurysms (88.4%) were less 15 mm. Thirty-six patients had unruptured aneurysms and 33 (47.8%) suffered hemorrhage in anamnesis. **Results:** A total of 69 endovascular procedures were performed. Coiling was used in 9 (13.1%) patients, coiling with stent assisting – 37 (53.6%) or coiling with balloon assisting – 9 (13.1%), flow diverters (FDs) – 7 (10.1%), and a combination of techniques in 7 (10.1%). Immediate complete occlusion (Raymond I) was achieved in 48 (69.6%) and near-complete (Raymond II) in 12 (17.4%) aneurysms. Occlusion rate in eight patients after FD was evaluated after 6–12 months. Complications leading to permanent morbidity in 3 (4.3%) patients. Mortality 2 (2.9%) patients. Good clinical result (mRs 0–1) has been obtained in 62 (89.8%). **Conclusion:** Endovascular treatment of aneurysms of the dBAA today is good alternative to open surgery. We have demonstrated complete or near-complete occlusion in 87% after initial treatment, with morbidity of 4.3%. Endovascular embolization is a safe and effective treatment modality in cases of dBAA.

P303

Endovascular Treatment of Dissecting Cerebral Aneurysm

Afra Alfalahi, Maryam Almeheri, Huda Alhashimi, Ayoub Abezadeh, Shaikh Sayeed Iqbal, Tarig Elnoor, Ayman Alsibaie

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

Educational Poster Background: Dissecting cerebral aneurysms are rarely encountered. The treatment is challenging since the incidence of rebleed and morbidity is high. Intracranial dissecting aneurysms were previously thought to occur primarily in early-aged patients who presented with subarachnoid hemorrhage. The appropriate management of dissecting aneurysms in the anterior circulation remains controversial. We present our experience with endovascular management of the dissecting brain aneurysm in the anterior and posterior circulation. Dissecting aneurysms are unstable with variable and unpredictable changes, and a thorough treatment is crucial.

P304

Endovascular Management of Cerebral Arteriovenous Malformations: Technical and Clinical Outcome

Ahmed Attia Ahmed Hassan, Ali Hassan Elmokadem, Ahmed Bahaa Elden Elserwi¹, Mohamed Metwally Abo El Atta, Talal Ahmed Youssef Amer

*Faculty of Medicine, Mansoura University, Mansoura, ¹Ain Shams University Specialized Hospital, Ain Shams University, Cairo, Egypt.
E-mail: dr.attiahassan86@gmail.com*

Objectives: (1) To report our institutional initial technical experience in the endovascular management of cerebral arteriovenous malformations (AVMs). (2) To detect the clinical outcome involving efficacy and complications of the endovascular management of cerebral AVMs. **Methods:** This is a cross-sectional study involving 14 cases diagnosed as having cerebral AVMs, who underwent diagnostic angiography and planned after written consent for an attempt of endovascular embolization.

- Our standard technique will be performed under a general anesthesia and get through transfemoral artery approach
- Microcatheter will be advanced through a guiding catheter to the arterial feeders supplying the cerebral AVMs.
- Onyx or Histoacryl was used as embolizing agent for successfully navigated cerebral AVMs by microcatheter
- Immediate follow-up conventional angiography was done to assess the size of residual AVM.
- Continuous clinical and radiological follow-up of our cases is still running every 6 months.

Results: Technical results involved successful microcatheter navigation and embolization in 9 of 14 cases (64%) with failed microcatheter navigation in 2 of 4 cases (14%) and failed embolization in 3 cases (22%). Clinical results involved controlled recent intracranial hemorrhage on 2 of 3 cases (67%), controlled seizure on 2 of 5 cases (40%), and complicated hemorrhage on 2 of 9 cases (22.2%) with one reported death. Anatomical results

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