

**Background:** Endovascular therapy (EVT) is considered to be the first line treatment for aneurysm however this treatment option has its limitations in cases of wide necked aneurysm (WNA). These include high risk of coil protrusion in the parent vessel and early recanalization in case of bifurcation aneurysms. These limitations prompted the development of more complex endovascular techniques. In the present short review, we give introduction of these techniques and devices and provide case examples performed in Rashid hospital Dubai. **Methods:** Balloon Remodeling: This technique is probably the more frequently used in the treatment of WNBAs. Balloon is temporarily inflated in front of the aneurysm neck followed by coil packing and deflation before permanent coil deployment to evaluate possible migration. In more than 30 cases of ruptured and unruptured WNA's dealt at Rashid hospital, the remodeling technique was shown to be safe and potentially improved anatomical results. Stent Assisted Coiling: A stent can be deployed across the aneurysm neck in the parent vessel and coiling performed with catheter progressed through the stent struts. Y Stenting: When the aneurysm is centered at bifurcation, a Y stenting technique can be used. Although the chances of morbidity are higher in this technique, we did not encounter any complications in our patient series at Rashid Hospital except occasional spasm in parent vessel. Woven Endobridge Device: WEB is an intrasaccular flow disrupter having a braided nitinol mesh. The mesh structure of the WEB provides a stentlike apposition to the aneurysm wall. Flow Diverters: Flow diverters are low-porosity stents designed to reduce hemodynamic exchange between the aneurysm and the parent artery, which promotes thrombosis and neointimal overgrowth over the aneurysm neck. Flow-diverter treatment is associated with high efficacy, but with safety that is inferior to standard coiling. pCONus: The pCONus is a stent-like endovascular implant featuring a distal end that opens like a blossoming flower with its four petals resting on the inside of the aneurysm along the neck. The petals support the deployment of coils inside the aneurysm. Other Devices: Pulse Rider device self expandable implants and Luna device are few other techniques employed in the coiling of wide neck aneurysms. **Results:** Provided in the form of pictures case examples. **Conclusions:** The management of a patient with a wide necked cerebral aneurysm is complex, however the continuous development of new neuro endovascular techniques and materials nowadays offer a significantly wider range of therapeutic possibilities in cases of aneurysms with unfavorable size and configurations which have traditionally been treated surgically.

### P302

#### Endovascular Management of Intracranial Dissecting Aneurysms: Single Center Experience

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**Background:** Management of intracranial dissecting aneurysms is controversial and technically challenging. The aim of this study is to evaluate the efficacy and safety of different endovascular management strategies. **Methods:** A retrospective analysis of all patients that underwent endovascular treatment of either ruptured or unruptured intracranial dissecting aneurysms, between 2011 and 2016, at a tertiary care center was performed. The technical and clinical results of different techniques were analyzed. **Results:** Among our 24 patients, 14 patients had

ruptured aneurysms and 10 cases had unruptured aneurysms. Parent vessel occlusion was performed in 12 cases, and artery preserving technique was successfully performed in 8 cases. Two cases showed spontaneous thrombosis of their aneurysms before treatment and 2 cases rebled and died before treatment. Among the 8 cases treated by artery preserving technique, 2 cases were treated by coils, 2 cases by stent-assisted coiling, 2 cases by flow diverter stent, 1 case by balloon assisted coiling and 1 case by 2 braided stents. No procedure related complications. Recurrence occurred in 1 case which is not treated yet. **Conclusions:** Endovascular approach offers many effective and safe strategies for the management of the intracranial dissecting aneurysms. The involved artery and the collateral circulation should be taken into consideration during decision making.

### P303

#### Sub Arachnoid Hemorrhage: Update in Endovascular Treatment of Intracerebral Aneurysms

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**Background:** Sub arachnoid hemorrhage (SAH) is mostly the result of ruptured aneurysms. There are two types of aneurysms, saccular and fusiform. Coiling is most prevalent endovascular treatment of saccular aneurysms. Challenge comes for wide neck saccular and fusiform aneurysms. Objective is to assess the latest endovascular treatment of wide necked saccular and especially of fusiform aneurysms. **Methods:** 178 patients were coiled between Jan 2015 to Nov 2016 in Department of interventional neuroradiology, Lahore General Hospital, Lahore. Patients were of both genders with age ranging from 22-65 yrs. Among them eight had wide neck or fusiform shape, which are difficult to coil by conventional coiling. **Results:** Out of 178 patients 170 were coiled with conventional coiling. Other eight had either wide neck or are of fusiform in shape. Flow diverters are latest mode of treatment for such aneurysms. Eight flow diverters were deployed five on fusiform and three on wide necked aneurysms. These are nickel cobalt soft stents especially designed for intra cerebral use. Wide necked aneurysms also had partial coiling for further reinforcement. All patients were successfully treated with no complications. **Conclusions:** Endovascular coiling is better option for treatment of both anterior and posterior circulation aneurysms with less morbidity and mortality. Flow diverters have added another option for endovascular treatment of wide necked and fusiform aneurysms.

### P304

#### Local Experience with a New Retrievable Device for Stroke Thrombectomy in a Tertiary Academic Center

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**Background:** Intravenous tPA has limitations in treating patients with large vessel occlusion stroke. The use of intra-arterial catheter for mechanical removal of thrombus was approved

by FDA in 2004 for using MERCI Retriever. Then retrievable stents were introduced with two randomized trials showing their superiority over the MERCI device. Stents development continued with introduction of other devices including the ERIC device which is believed to have some advantages over the first generation retrievable stents. However, local published experience with the device is lacking. **Methods:** During a 2-year period at academic center in Jeddah, we conducted a retrospective study of all patients who were treated within 6 hours after the onset of symptoms of acute ischemic stroke and were treated with the ERIC device. All patients had confirmed proximal anterior circulation occlusion and a favorable ASPECT score on neuroimaging. **Results:** Nine stroke patients were enrolled in this retrospective study. The median age was 60.5 years and the median NIHSS score on admission was 19. Six patients had middle cerebral artery occlusions while one patient had terminal carotid occlusion, one basilar occlusion, and one anterior cerebral artery occlusion. Distal access catheterization was done in all but one patient. Balloon guide catheters were not used. The rate of successful angiographic reperfusion (TICI 2b or 3) with the ERIC device was 67% (six patients) while 22% (two patients) had TICI 2a score due to distal non-target embolization noted on the final angiograms. The 24 h and 7 days median NIHSS were 14 and 9, respectively. The median modified Rankin Scale on discharge was 3 and two (22%) died. One patient had symptomatic hemorrhagic transformation of the infarct. **Conclusions:** The ERIC device was successfully deployed in all cases and achieved reperfusion in the majority of cases with large vessel acute ischemic stroke.

#### P401

### Role of Trans-Catheter Prostatic Artery Embolization in Management of Benign Prostatic Hyperplasia

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**Background:** To evaluate the efficacy and safety of prostatic artery embolization as a line of treatment for benign prostatic hyperplasia in patient with moderate to severe lower urinary tract symptoms (LUTS) secondary to BPH after failure of medical treatment. **Methods:** Twenty patients included in this study and their ages ranged from 43-93 years (mean 68.3 y). All patients complained of moderate to severe LUTS secondary to benign prostatic enlargement. All patients underwent prostatic artery embolization (unilateral n = 5 and bilateral n = 15). The embolizing material used is PVA ranged from (45-250). Patients were followed up using international prostate symptom score (IPSS), prostate volume, quality of life (QOL) and peak flow rate (Qmax). **Results:** Nineteen patients show IPSS reduction by 0.0-86% (mean 73.68% +/- 16.8), prostate volume reduction by 14.6-41.5% (mean 26.16% +/- 7.8), QOL improvement by 0.0-100% (mean 81.3% +/- 24.34) and Qmax improvement by 36.1-80.5% (mean 62.6% +/- 14.29) after one and three months follow up. Clinical improvement was +/- 95%. One patient shows clinical failure after successful bilateral prostatic artery embolization. No deaths. Minor complications

as hematuria and blood in stool occurred in 10% (2 cases) and were self-limited. **Conclusions:** Prostatic artery embolization is safe and effective line of treatment for patients with moderate to severe LUTS secondary to benign prostatic enlargement after failure of medical treatment. It has low morbidity, good short-term symptomatic control associated with prostate volume reduction and quality of life improvement.

#### P402

### Ultrasound Guided Percutaneous Biopsy of Omentum: A Safest Technique to Detect the Causes of Omental Thickening

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**Background:** The objective of our study was to determine the diagnostic value and safety of ultrasound guided percutaneous biopsy of omental thickening. **Methods:** We prospectively analyzed 60 patients who underwent USG-guided omental biopsies in our institute from January 2016 to July 2016. **Results:** Total 60 patients were included in our study. There were 40 (66.7%) female and 20 (33.3%) male patients. There were total 36 (60%) malignant cases, 20 (33.3%) chronic inflammation suggestive of TB while 4 (6.7%) were chronic peritoneal infection. Out of 36 malignant cases, majority 24 (66.7%) had ovarian cancer, 8 (22.2%) had endometrium cancer and 4 (11.1%) had large bowel cancer. Repeat biopsies were performed only in 4 (6.7%) cases. **Conclusions:** Ultrasound-guided percutaneous biopsy of omentum is less expensive, safe and effective method with a high diagnostic accuracy.

#### P403 (First place poster presentation prize winner)

### Role of Interventional Radiology in Removing Unwanted and Misplaced Medical Devices

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A large variety of medical devices are implanted by various specialties. Standard techniques are often successful in removing these implants. Occasionally, these devices are misplaced, lost or embedded in such a way that they require removal using unconventional methods. Interventional radiology techniques permit practitioners to remove these unwanted or misplaced devices in a safe and minimally invasive manner. We present case vignettes highlighting our experience and techniques in dealing with such scenarios. Presented cases include removal of bile ducts stents placed initially with ERCP, "lost" intravascular guidewires, removal of oesophageal stents, removal of needle fragments from soft tissues and removal of embolized catheter fragment from pulmonary circulation. Failure to retrieve misplaced or unwanted medical devices using standard methods is not an uncommon occurrence in hospital practice. Interventional Radiology offers safe and minimally invasive solution in such scenarios.