

**P207****Percutaneous Ablative Treatment of Renal Tumors in a Solitary Kidney: A Single-Center Experience**

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**Objectives:** To evaluate the safety, efficacy, functional outcomes, and local tumor control of ablation procedures for the treatment of renal T1a and T1b lesions in a solitary kidney. **Methods:** Sixty percutaneous ablative procedures of renal T1a and T1b lesions, in 25 patients with solitary kidney, were retrospectively analyzed: 26 (43.3%) procedures with radiofrequency ablation (RFA), 26 (43.3%) with cryoablation (CRA), and 8 (13.4%) with microwave ablation (MWA). Biopsy was performed for all the lesions. Efficacy of the treatment was evaluated as the absence of residual tumor immediately and on the 1 month after ablation. The secondary outcomes of interest included complications rate, disease-free survival (DFS), cancer-specific survival (CSS), overall survival (OS), and renal function. The correlation between tumor characteristics and the three treatment groups was conducted using Kruskal–Wallis test. The same test was also used to evaluate the correlation among DFS, CSS, OS, and renal function and the three treatment groups. **Results:** The mean age of the patients was 65.6 years (54–88 years); the mean tumor size was 19.3 mm (6–55). Fifty-nine lesions (96.7%) were T1a and two (3.3%) T1b. The mean RENAL nephrometry score was 5.5 (range, 4.0–10.0). Analyzing all the tumor characteristics among the three groups of treatments, lesion dimensions and the RENAL score significantly correlated with the procedural employed method with a  $P < 0.01$ , respectively. The treatment was effective in 96.7% of cases, with periprocedural major complications in only three patients (5%). In 1-year follow-up, 10 recurrences (16.7%) were documented: four (15.4%) for lesions treated with RFA, one (12.5%) with MWA, and five (19.2%) with CRA ( $P > 0.05$ ). All recurrences were retreated with a consequent local tumor control. Analysis of renal function showed no significant changes between pre- and post-ablation creatinine levels. The only significant predictor of DFS in the multivariate analysis was the histotype, with a higher recurrence rate in RCC ( $P < 0.05$ ). **Conclusion:** Our study found no significant differences in complications, renal function outcomes, and oncologic outcomes between the three ablative procedures for patients with a tumor in a solitary kidney. Patient selection, based on the tumor characteristics, remains crucial for the choice of the type of treatment.

**P208****Percutaneous Insertion of Biliary Metallic Stent in Patients with Malignant Duodenobiliary Obstruction: Outcomes and Factors Influencing Biliary Stent Patency**

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**Objectives:** To investigate the technical and clinical efficacy of the percutaneous insertion of a biliary metallic stent and to identify the factors associated with biliary stent dysfunction in patients with malignant duodenobiliary obstruction. **Methods:** From April 2007 to December 2018, the medical records of 70 patients (39 men, 31 women; mean age, 63 years; range, 38–90 years) with malignant duodenobiliary obstruction were retrospectively reviewed. Duodenal stent insertion was performed either fluoroscopically ( $n = 38$ ) or endoscopically ( $n = 32$ ) using covered ( $n = 52$ ) or uncovered stents ( $n = 18$ ). Variables found to be significant by univariate log-rank analysis ( $P < 0.2$ ) were considered candidate variables for multiple Cox's proportional hazard model. **Results:** The biliary stents were successfully placed in all 70 patients (uncovered stents [ $n = 7$ ], covered stent [ $n = 33$ ], covered stent with additional covered stent [ $n = 13$ ], and covered stent with long duodenal-covered extension [ $n = 17$ ]). Biliary stent insertion with subsequent duodenal stent insertion was performed in 33 patients, and duodenal stent insertion with subsequent biliary stent insertion was performed in 37 patients. Successful internal drainage was achieved in 60 (85.7%) of 70 patients. The median patient survival and stent patency time were 107 days (95% confidence interval [CI], 78–135 days) and 270 days (95% CI, 95–444 days). Biliary stent dysfunction was observed in 24 (34.3%) of 70 patients, after a mean time of 87 days. Multiple Cox's proportional hazard analysis showed the location of distal biliary stent was the only independent factor of biliary stent patency ( $P = 0.028$ ; odds ratio, 3.771; 95% CI, 1.157–12.283). Median biliary stent patency rate was significantly longer in patients who had the distal end of the biliary stent beyond the distal end of the duodenal stent (mean, 358 days; 95% CI, 56–660 days), rather than had the distal end of biliary stent within duodenal stent (mean, 135 days; 95% CI, 95–175 days). **Conclusion:** Percutaneous insertion of the biliary metallic stent appeared to be technically feasible, safe, and effective method for the treatment of patients with malignant duodenobiliary obstruction. Moreover, the location of the distal end of the biliary stent beyond the distal end of the duodenal stent would be more effective in these patients.

**P301****Mechanical Thrombectomy by Direct Aspiration First-Pass Technique in Ischemic Stroke: Initial Experience**

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**Objectives:** To study the therapeutic effectiveness of direct aspiration first-pass technique (ADAPT) in patients with large-vessel occlusion. **Methods:** From September 2017 to September 2019, a total of 25 patients presenting with large-vessel occlusion of anterior and posterior circulation underwent mechanical thrombectomy. In all the patients, we attempted clot aspiration with ADAPT. Ten patients also received intravenous tissue-type plasminogen activator. Every patient was initially evaluated with noncontrast computed tomography (CT) or magnetic resonance imaging (MRI) along with CT/MR angiography. If the patient presented beyond 6 h

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  $\leq 2$  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

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**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

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**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

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**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