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OR1.7

Postsurgical Prophylactic Embolization of Chronic Subdural Hematomas in Patients with High Recurrence Risk: A Monocentric Study

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Objectives: The gold standard treatment for chronic subdural hematomas (cSDHs) is the surgical evacuation through a burr hole. Recurrence after such surgical procedure may occur in 10%–20% of the cases. Embolization through the middle meningeal artery (MMA) is a promising technique for the treatment of cSDHs. The purpose of our study was to evaluate the feasibility, safety, and effectiveness, in terms of recurrence reduction, of postsurgical embolization of cSDH in patients with high risk of recurrence. **Methods:** A monocentric retrospective study was performed on prospectively collected data at Pitié-Salpêtrière Hospital. From March 2018 to February 2019, embolizations with calibrated microparticles through the MMA were performed in patients surgically treated for a cSDH with a high risk of recurrence, defined as follows: (1) previous recurrence of cSDH or (2) antiplatelet therapy or (3) full anticoagulation therapy or (4) coagulation disorder or (5) hepatopathy or (6) chronic ethylism. In all patients, a preembolization supra-aortic trunks (SATs) computed tomographic angiography was performed to rule out a dumb-bell thrombus on the aortic arch or severe atheroma/tortuosity of the SATs. **Results:** Forty-four patients met the inclusion criteria during the inclusion period. Two patients were excluded (one in a prolonged comatose state and another with a chronic renal failure). Two patients refused the embolization procedure. The last patient was excluded due to major atheroma on the SATs. Finally, 39 patients with 43 cSDHs (4 patients had bilateral SDHs) underwent the embolization procedure. Thirty-seven embolization procedures (95%) were performed under local anesthesia. Among the 43 cSDHs, 5 (9%) could not be embolized due to catheterization failure (4 cases) or to the presence of a "dangerous anastomosis" (1 case). No complication (either major or minor) was recorded. Only one recurrence (2.6%) requiring surgical retreatment was recorded during the follow-up period. **Conclusion:** Postsurgical embolization through the MMA is a simple and safe procedure, which may reduce the recurrence risk of cSDHs. These preliminary results should be confirmed by randomized controlled trials.

OR1.8

Initial Experience with NeVa Stent Retriever in the United Arab Emirates

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Objectives: We present the initial experience with a novel stent retriever to treat acute large-vessel occlusions, particularly paying attention to the rate of first-pass affect. We analyze some of the technical aspects of the NeVa device that might increase the first-pass effect incidence. **Methods:** Patients treated in Cleveland Clinic Abu Dhabi since June 2019 are included. We present the clinical and radiological data of these patients. In addition, the pathological study of the retrieved clots is included. **Results:** A total of seven patients were treated with the NeVa device. In six patients, a combination of aspiration and stent retriever was initially used. All of them had first-pass recanalization. Two were occluded at the internal carotid terminus; one of these was a tandem occlusion. Three had the occlusion at the M1 level. One of these required the placement of an intracranial stent due to the suspicion of underlying intracranial atherosclerosis. Another one had an M2 occlusion. Finally, a patient who was initially treated with only aspiration had a residual M2 clot that was retrieved in a single attempt with the NeVA device. In cases where the clot was retrievable, it was sent to pathology for analysis. **Conclusion:** In our experience thus far, the NeVA device has proven to be safe and effective in the management of large-vessel occlusion clot retrieval.

OR1.9

Double-Stent Retriever Thrombectomy

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Objectives: Mechanical thrombectomy (MT) with a stent retriever is a technique for the treatment of stroke. The objective of the present study is to evaluate the use of a double-stent versus the use of a single stent in MT comparing results, complications, and procedure time. **Methods:** We retrospectively assessed the patients who underwent MT during the year 2018 in a reference center (n = 135); 108 met the inclusion criteria. The patients were subsequently divided into two groups, Group A (n = 76), where a single stent was used, and Group B (n = 32), double stent, dividing the patients into subgroups by age and gender. Variables such as procedure time, clogged arterial segment, complications, and final outcome were assessed, using the modified scale of treatment in cerebral infarction (mTICI). In addition, in Group B, the type of stents used and the number of passes made were valued. **Results:** 45% of the cases were women, between the ages of 34 and 93, with the largest group being patients older than 80 years (46%). In Group A, 43% were women, and in Group B, 50% were women. In Group A, recanalization was performed in 57.9% of the cases after a single pass, and in Group B, this result was obtained in 43.7% of the cases. The mean duration of the procedure was 33 min in Group A and 47.5 min in Group B. **Conclusion:** MT with double stent for the treatment of acute ischemic stroke is an alternative with better results for complex obstructions or at several levels with better recanalization rates.

OR1.10

Initial Clinical Experience with a New Low-Profile Thoracic Stent-Graft Prosthesis

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Objectives: We report our initial experience with the new low-profile Relay®Pro thoracic stent-graft (Terumo Aortic) prosthesis in the treatment of different thoracic aortic pathologies. **Methods:**

Between October 2018 and July 2019, a total of 20 Relay®Pro prostheses were implanted in the thoracic aorta in 17 patients. Indications for the treatment included aortic dissection (n = 6), penetrating aortic ulcers (n = 5), and aortic aneurysm (n = 6). **Results:** The implantation was transfemoral with a mean duration of 85 min. The access site diameter was 7 mm in 24% of patients. TEVAR implantation in the zone I/II was performed in seven patients with simultaneous double transposition or carotid subclavian bypass. In the remaining cases, the proximal landing zone was in zone 3 or existing endovascular prosthesis. The technical success was 100%, and there were no deaths or complications. Endoleak was seen in two patients. The fluoroscopy time averaged 14 minutes. **Conclusion:** Due to the modified release mechanism, the new Relay®Pro TEVAR prosthesis is characterized by very good controllability and safe handling, and due to the reduction in profile, it is also suitable for use in narrow vascular access or in the passage of existing endograft. These early experiences need to be consolidated by increasing the number of cases and following patients.

OR1.11

Aorfix and Altura Endovascular Stent Grafts for Abdominal Aortic Aneurysm Repair

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Objectives: To study the efficacy, 30-day morbidity and mortality, re-intervention rate, and durability of using the Aorfix and Altura devices for abdominal aortic aneurysm (AAA) repair. **Methods:** A prospective cohort study of patients undergoing AAA repair with Aorfix or Altura stent was maintained by the vascular studies unit at Northampton General Hospital. Patients were followed up routinely with scans at 6 weeks, 3 months, 6 months, 1 year, and annually thereafter. Case notes and discharge summaries were studied to identify the immediate postoperative complications. Clinic follow-up letters and any readmission were analyzed if related to original procedure. Results are presented for Aorfix (Group1) and Altura (Group 2) devices separately. **Results:** Group 1 consisted of seven patients who underwent AAA repair with Aorfix, between October 2015 and January 2019. The median age was 75 (65–87) years. The median AAA diameter was 63 mm (55–75). The median ASA and Detsky scores for this group were 3 and 5, respectively. Two patients had a percutaneous procedure, and five had open access. The median neck length was 31.5 mm (15–60). The median neck diameter was 19.5–22.5 mm (19–24.5). Beta neck angulation was 60.5° (30°–98°). The median follow-up duration was 2.5 years (2–4). One patient had an endoleak (type 1a) noted at the time of the procedure, which was treated conservatively and resolved during the hospital stay. One patient died 3 months after the procedure due to unrelated reasons. In Group 2, five patients underwent AAA repair with the Altura device between February and May 2016. The median age was 67 (65–73) years. The median AAA diameter was 57 mm (55–59). The median ASA and Detsky scores were 3 and 0, respectively. Two patients had a percutaneous procedure and three had open access. One of the three patients who had open access was converted to an open procedure due to issues with the stent deployment device. The median neck length was 36.5 mm. The median neck diameter was 18.5–20.5 mm. The median follow-up duration was 3.5 years (3.5–4). In both groups, all cases were elective. None of the patients had acute kidney injury postprocedure. Technical success rate was 100% with both devices. There was a small endoleak noted in one patient who had the Aorfix stent, which was treated conservatively and resolved spontaneously. There were no 30-day morbidities in both groups. Only one of the total 11 patients died, but this was due to complications from his metastatic bladder cancer. At the time of follow-up, at year 3, there was one type 3 endoleak in the Aorfix group which was treated by endovascular extension of the iliac limb. No stent migrations identified. **Conclusion:** Although it was used in highly angulated and challenging anatomy, our initial experiences with Aorfix and Altura are promising with no 30-day morbidities or mortalities. There were no long-term complications at the time of follow-up. Technical success was 100%. Further studies are still required to validate our initial experiences.

OR2.1

One-Year Outcomes of the Paclitaxel-Eluting Stent for TASC C and D Femoropopliteal Lesions in Real World

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Objectives: The aim of this study was to assess the 1-year outcomes of the paclitaxel-eluting stent (PES) for TASC C and D femoropopliteal lesions. **Methods:** This study is a single-center, retrospective observational study of PES for peripheral arterial disease. From February 2017 and May 2018, the patients who underwent PES (two types; Zilver PTX, COOK Medical and Eluvia, Boston Scientific) for TASC C/D femoropopliteal lesions were included. Primary patency, target lesion revascularization, and event-free survival up to 12 months after the procedure were evaluated. **Results:** A total of 34 patients (37 limbs) were included (30 males and 4 females; mean age: 71.9 ± 9.1 years; range: 53–90 years). Twenty-five limbs (68%) were TASC D lesions and 12 limbs (32%) were TASC C lesions. The mean lesion length was 24.6 ± 6.6 cm (range, 9–46 cm). Seventeen lesions (46%) had more than a moderate calcific burden. The mean number of stents was 2.5 ± 0.7 (1–3), covering 24.3 ± 7.9 cm (range: 6–35 cm). A total of 23 Zilver PTX stents and 14 Eluvia stents were used. The Kaplan–Meier estimate of 1-year primary patency (PP) and freedom from target lesion revascularization (fTLR) were 78% and 88% (Zilver PTX, 81% and 76%; Eluvia, 91% and 100%). Event-free survival was 84% in two patients. Major adverse events requiring treatment occurred in two patients (2/34, 5.8%), which were acute thrombotic occlusions. **Conclusion:** The 1-year outcome of PES for TASC C/D femoropopliteal lesion in the real world showed promising PP and fTLR rates, which are not significantly different from previous data.