was achieved in 87.5%(7/8). There was one delayed death at 2-year from an unrelated cause.

Conclusions pCONUS 2 and pCONUS 2-HPC have good medium-term safety profiles with no procedure-related mortality and acceptable morbidity. Good occlusion rates was noted at 6-months (85.7%) and 2 years (87.5%).

REFERENCES

1. Aguilar-Pérez M, Kurre W, Fischer S, Bázner H, Henkes H. Coil occlusion of wide-neck bifurcation aneurysms assisted by a novel intra-to extra-aneurysmal neck-bridging device (pCONUS): initial experience. *American Journal of Neuroradiology* 2014;35(5):965–971.
2. Phenox GmbH, 2018. pCONUS bifurcation aneurysm implant instructions for use. [Online]. [Accessed 17/05/2020]. Available from: base.euro-pharmat.com/PDF/15004-43521-8.pdf

Disclosure Nothing to disclose

EP13

PCONUS-2 HPC IN THE TREATMENT OF RUPTURED WIDE NECKED INTRACRANIAL ANEURYSMS WITH SINGLE ANTIPLATELET USE- SHORT TERM RESULTS

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Introduction pCONUS 2-HPC (Hydrophilic Polymer Coating) are novel bifurcation aneurysm implants designed to support the endovascular coil occlusion of wide necked bifurcation aneurysms. Use of pCONUS-2 HPC in ruptured intracranial aneurysm using single antiplatelet loading dose is controversial. The device innovates on the previous generation by increasing the number of wire petals in the crown of the device from four to six, increasing stability of the implant and shortening the length of the device shaft. This allows the pCONUS-2 HPC device to be used in cases where there is a larger angle between the parent vessel and the aneurysm.¹

Aims of the Study To summarise device intraprocedural complications, periprocedural outcomes and 6-months follow-up of pCONUS-2HPC with pre procedure single antiplatelet loading dose.

Methods This prospective, single-arm study reviewed a total of 4 patients with 4 wide necked aneurysms treated over 1 year period, between 13/05/2020 and 18/05/2021 at our tertiary centre. All patients with acute ruptured wide necked intracranial aneurysms were included in the study. All patients were preloaded with prasugrel 4 hours before procedure.

Results The mean age of the cohort was 55.7 years. All patients received loading dose of 30–60 mg prasugrel 4 hours before the procedure. There was no mortality or stroke in the series. At 6 months, satisfactory occlusion was achieved in 75% (3/4) aneurysms. There was 1 early coil impaction recurrence that was retreated.

Conclusions pCONUS 2-HPC with single antiplatelet loading dose is feasible with no immediate complications in our series.

REFERENCE

1. Phenox GmbH, 2018. pCONUS bifurcation aneurysm implant instructions for use. [Online]. [Accessed 17/05/2020]. Available from: base.euro-pharmat.com/PDF/15004-43521-8.pdf

Disclosure Nothing to disclose

EP14

CONTOUR® PLUS COILING WITH JAILED MICROCATHETER FOR BETTER OCCLUSION (COCOJAMBO) IN WIDE-NECKED INTRACRANIAL ANEURYSMS: PROOF OF PRINCIPLE AND ANGIOGRAPHIC RESULTS

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Purpose Wide-necked bifurcation aneurysms, partially thrombosed, and giant aneurysms are challenging to treat. We report our preliminary experience with a Contour®-assisted coiling technique and discuss the periprocedural safety, feasibility, and effectiveness of the approach.

Methods We retrospectively reviewed consecutive patients who received endovascular treatment for intracranial aneurysms with an intra-aneurysmal flow disruptor (Contour) between October 2018 and December 2020 and identified patients treated with a combination of Contour and platinum coils. Clinical and procedural data were recorded.

Results For this analysis, 5 patients treated with CoCoJaMBO were identified (2 female). The mean age was 62.4 ± 7.4 years. Four of 5 aneurysms were associated with previous acute subarachnoid hemorrhage (SAH). The mean dome height was 12 ± 8.5 mm, the mean dome width 10.2 ± 6.3 mm and the mean dome to neck ratio 2.5 ± 1.2 . Adequate occlusion at the end of procedure was achieved in 4 of 5 cases. In one SAH patient, a parent vessel was temporarily occluded but could be reopened rapidly. One device detached prematurely without any sequelae. No other procedural adverse events were recorded. Six month follow up data will be available for presentation but were not available at the time of completion of this abstract

Conclusion From this initial experience, Contour with adjunctive coiling is a safe and technically feasible method for endovascular treatment of large, wide-necked, partially thrombosed, or ruptured bifurcation aneurysms. Further studies with larger numbers of patients and longer follow-up are needed to confirm our results.

Disclosure FW and OJ are consulting for Cerus Endovascular. JH and SP have no Conflicts of interest.

EP15

STENT-ASSISTED COILING OF THE ACUTE RUPTURED CEREBRAL ANEURYSMS

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Introduction Aneurysmal subarachnoid hemorrhage is a serious threat to life of patients, with a risk of unfavorable outcomes of up to 80%. An international ISAT study (Molyneux, 2002) proved the preference of endovascular treatment of aneurysms in the acute period of rupture, but the issue of incomplete occlusion and recanalization of aneurysms has not been fully resolved.

The study aims at showing the efficacy and safety of stent-assisted coiling of acute ruptured aneurysm as compared with balloon-assisted coiling.

Methods Following the clinical experience of 257 acute ruptured aneurysms treated in the neurosurgical department of the Meshalkin Clinic from 01.2011 to 12.2020, a retrospective database was generated. To remove the possibility of statistical error, propensity score matching was performed for key positions: severity of hemorrhage and anatomical characteristics of aneurysms. Groups 'stents' and 'balloons' were analyzed.

Results At the follow-up, in the stent-assistance group, radical total occlusion of aneurysms was registered in 79.07% cases (n=34), while when using balloon-assistance, an excellent result (RR I) was obtained in 51.16% cases (n=22) (p=0.013). By the time of the follow-up examination, there was an improvement in the condition of patients in each group with a gradual increase in 'good' outcomes (mRS 0–2) without a statistical difference between the groups (p=0.391).

Conclusions The applying of intracranial stents for embolization of acute ruptured cerebral aneurysm increases the radicality of endovascular treatment as compared with balloon-assisted embolization. The clinical outcomes of stent-assisted coiling are no worse than those of balloon-assisted coiling in similar conditions.

REFERENCES

- Shapiro D, Becske M, Sahlein T. Stent – supported aneurysm coiling: a literature survey of treatment and follow – up. *AJNR Am J Neuroradiol* 2012;33.
- Pierot L, Cognard C, Spelle L, Moret J. Safety and efficacy of balloon remodeling technique during endovascular treatment of intracranial aneurysms: critical review of the literature. *Am J Neuroradiol* 2012;33(1).
- Jia X, Wang L, Zhang J, Ming L, Yang LV. Safety and efficacy of endovascular treatment for intracranial ruptured aneurysms: stent-assisted coiling vs. single coiling. *Clin Surg* 2019;4.

Disclosure Nothing to disclose

EP16

WEB COLOMBIAN MULTICENTER EXPERIENCE (WEB.COM): CLINICAL AND RADIOLOGICAL RESULTS IN THE TREATMENT OF INTRACRANIAL ANEURYSMS USING INTRASACCULAR FLOW DISRUPTERS

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Materials and Methods Consecutive patients treated with WEB were selected from March 2016 to February 2020 in six different centers in our country. We retrospectively evaluated clinical records, anatomical and angiographic variables.

Results 73 patients (mean age: 52.8) with 75 IA were treated with WEB. History of SAH in 18/75(24%). A total of 84 devices were attempted and finally implanted 75 (1.1 device per aneurysm) of these, eight devices were exchanged due to sizing failures, one case of WEB miss-opening was discarded. 59/75 (78.6%) were located in anterior circulation (MCA: 32, ACA: 19, ICA: 8). Sixteen cases in the posterior circulation (Basilar tip: 13, SCA: 2, VBJ: 1). An additional strategy was observed in five cases (6.6%): high porosity stent in four and balloon-assisted web in one case. WEB SL was used in 82.6% and WEB SLS configuration in 13/75. Radiological follow-up available 6–12 months in 49/73 (67%) with complete occlusion in 54.9% and adequate occlusion rate according to WOS in 93%. None thromboembolic complications were reported. Two patients with severe hemorrhages procedure-related (one case of ICA rupture secondary to DAC advancement, and one tip-basilar

aneurysm perforated with the microwire). Overall morbid-mortality of 2.6%.

Conclusion In this multicenter experience, the treatment of IA using WEB was feasible, safe, and effective. Overall morbid-mortality (2.6%) aligned with previous publications.

REFERENCE

- Kabbasch C, et al. Factors that determine aneurysm occlusion after embolization with the Woven EndoBridge (WEB). *J Neurointerv Surg* 2019. PMID: 30355777.

Disclosure Boris Pabon proctorship con MEDTRONIC, Microvention Consultant MIVI

EP17

IS THE WOVEN ENDOBRIDGE STILL GOING STRONG AT 5-YEAR FOLLOW-UP?

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Background and Aim To report the 5-year clinical and radiological outcomes of naïve intracranial aneurysms (IAs) treated with the Woven EndoBridge (WEB).

Methods The data were collected retrospectively in three centers. The clinical and radiological outcomes of patients with 5-year radiological follow-up were included. Imaging follow-up was performed with digital subtraction angiography and/or magnetic resonance angiography. Aneurysm occlusion was determined using by the Raymond-Roy Occlusion Classification (RROC). RROC 1 and RROC 2 were considered as adequate outcome.

Results The data were available for 22 patients (15 females; median age, 60.5 years, range; 39–69) with twenty-two IAs (16 unruptured IAs) treated with WEB. The median width and height of IAs were 5.5 mm (range; 3–9) and 7.5 mm (range; 4–19), respectively. The most common location of IAs treated with WEB was basilar tip (n=7, 23%). Endovascular treatment with WEB alone was suitable for 20 IAs (91%). The median follow-up time was 61 months (range: 56–63 months). The complete occlusion (RROC 1) was seen in thirteen IAs (59%) and neck remnant (RROC 2) were detected in nine IAs (41%) at 5-year follow-up. The radiological outcome of one IA (5%) worsened from RROC 1 to RROC 2 after 2-year follow-up. None of the IAs treated with WEB ruptured and/or re-ruptured.

Conclusions This preliminary study shows the efficacy and safety of WEB treatment at 5-year. Aneurysm occlusion appears to be stable after 2 years.

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EP18

QUANTIFICATION OF INTRACRANIAL ANEURYSM PULSATIIONS WITH ECG-GATED 4D CTA

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