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 (RROC 1) 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

Disclosure Nothing to disclose

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 morbidity mortality of 2.6%.

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

REFERENCE

Disclosure Boris Pabon proctorship con MEDTRONIC, Microvention Consultant MIVI

IS THE WOVEN ENDBRIDGE 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 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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QUANTIFICATION OF INTRACRANIAL ANEURYSM PULSATIONS WITH ECG-GATED 4D CTA


Disclosure nothing to disclose