WEB COLOMBIAN MULTICENTER EXPERIENCE (WEB. COM): CLINICAL AND RADILOGICAL MID- TERM RESULTS IN THE TREATMENT OF INTRACRANIAL ANEURYSMS USING INTRASACULAR FLOW DISRUPTERS

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Introduction: Woven EndoBridge (WEB) is a novel device for the treatment of ruptured and unruptured bifurcation aneurysms. To our knowledge none experience in Latin America has been reported. Here, we present a multi-center experience including mid and long-term follow data of patients treated with WEB.

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. Additionally, WEB technical aspects, Procedure time and the presence of adverse events procedure-related were registered. Immediately angiographic results and mid, long term- follow up were analyzed and described below.

Results: 73 patients (mean age: 52.8) with 75 IA were treated with WEB. History of SAH in 16/75 (21%). A total of 84 devices 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 discharged. 59/75 (78.6%) were located in anterior circulation (MCA: 32, ACA: 19, ICA: 8). Sixteen cases in 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 moths in 49/73 (67%) with adequate occlusion rate according to WOS in 86.6%. None thromboembolic complications. Two patients with severe hemorrhages procedure-related (one case of ICA rupture due to DAC advancement, and one wire- perforation of tip- basilar aneurysm). 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. Special care regarding sizing methodology and proper training to reach an accurate and fast learning curve should be considered. This technology constitutes a good and valuable tool to treat bifurcation IA’s but also is on the way to be applied in different scenarios than WNBA in highly selected patients.


CLINICAL AND ANGIOGRAPHIC RESULTS WITH THE NEW GENERATION SURPASS FLOW DIVERTER, EVOLVE: A SINGLE CENTER REAL WORLD EXPERIENCE

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Objective: To share the angiographic and clinical outcome in 35 consecutive patients treated with new generation Surpass Evolve Flow Diverter in our institution by a single operator team.

Methods: Thirty-five consecutive patients (70% women, average age 58 years), with anterior or posterior circulation aneurysms treated with Surpass Evolve FD in a single centre. Technical, clinical and angiographic results were analyzed.

Results: Thirty-six Surpass Evolve were successfully implanted in all subjects to treat 35 patients using an XT 27 (0.027”) microcatheter supported by a Cathayst 5, 0.58 F distal access system and a proximal 0.88 F long sheath. No deployment failure in our series was observed. No intra-procedural morbidity or mortality was seen. No increase in the mRS until March 2020. Clinical and angiographic follow-ups are ongoing and will be completed and presented at the annual meeting.

Conclusions: Our preliminary experience demonstrates good performance of the Surpass Evolve with no intra-procedural mortality and morbidity and no increase in mRS until the time of submission of this paper. The follow-ups are still in process and full results will be presented at the meeting. The technology is a more user-friendly technology due to the device characteristics with far easier advancement, the accuracy of placement and adjustment features.

Disclosures: S. Derakhshani: None. J. Lynch: None. L. Kanagarajah: None.

COMPARING EFFICACY OF PLATELET INHIBITION IN PATIENT TREATED WITH CLOPIDOGREL VERSUS PRASUGREL UNDERGOING CEREBRAL ANEURYSM STENT-ASSISTED EMBOLIZATION WITH FLOW DIVERSION

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Objective: to compare the efficacy of Prasugrel versus Clopidogrel in the treatment of ruptured and unruptured cerebral aneurysms treated with Flow Diversion stent-assisted embolization.

Methods: The study included a total of 20 consecutive patients treated with Flow Diversion stent-assisted embolization from January 2017 to August 2019. The patients were divided into two groups based on the type of platelet inhibition therapy: Group 1 received Clopidogrel (n=10) and Group 2 received Prasugrel (n=10).

Results: The primary end point was the incidence of ischemic complications. There were no significant differences in the incidence of ischemic complications between the two groups (Group 1: 10%, Group 2: 30%). The mean difference in ischemic complications between the two groups was 20%. The differences were statistically significant (P-value: 0.03).

Conclusion: Prasugrel was found to be more efficacious than Clopidogrel in the treatment of ruptured and unruptured cerebral aneurysms treated with Flow Diversion stent-assisted embolization. Further studies with a larger sample size are needed to confirm these findings.