

Introduction Few studies have compared the Pipeline Shield stents with previous generations of flow-diverting stents (FDs) for treating unruptured intracranial aneurysms (IA).

Aim of Study This study aimed to evaluate the efficacy and safety of Pipeline Shield stents and FDs without modified surfaces.

Methods The present evaluation is a retrospective cohort study of patients endovascularly treated for unruptured IA. The data analyzed was obtained from the anonymized database of the institution's Interventional Radiology service.

Results The aneurysms treated with Pipeline Shield stents had higher six-month (OKM D; 87.5% vs. 71.4%, p-value: 0.025) and one-year (OKM D; 82.5% vs. 63.0%, p-value: 0.047) occlusion rates than aneurysms treated using FDs without modified surfaces. No differences between the devices were found at the one-year follow-up in ischemic stroke (p-value: 0.939) and hemorrhagic complications (p-value: 0.559).

Conclusion The treatment with Pipeline Shield stent was as safe as with FD stent without modified surfaces. However, they showed a greater occlusion efficacy during one-year evaluation period.

Disclosure of Interest nothing to disclose

P083/233 ANGIOGRAPHIC OUTCOMES OF EMBOLIZATION IN PATIENTS WITH INTRACRANIAL ANEURYSMS WITH COIL-ASSISTED LASER CUT VERSUS BRAIDED STENTS

Andrés Ortiz*, Daniela D Vera, Andrés Catalá, Paula Correa, Omar Flores, Juan Jose Lara, Sergio Serrano, Adriana Reyes, Carlos Ferreira, Oliverio Vargas, Daniel Mantilla García. UNAB/FOSCAL, Bucaramanga, Colombia

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Introduction Intracranial aneurysms are a focal dilatation of the vessel wall, the rupture of these, causes subarachnoid hemorrhage. Until now, endovascular management is the ideal treatment, providing the interventionist a range of options among which the stent and coils embolization stands out because of its occlusion rate.

Aim of Study This study presents the results of a retrospective cohort comparing the effectiveness, morbidity, and mortality of IA treatment with laser-cut stent-assisted coils versus braided stents.

Methods Retrospective cohort of patients diagnosed with unruptured intracranial aneurysms treated with coil-assisted laser-cut stents or braided stents.

Results 138 patients with 147 intracranial aneurysms were analyzed, with the main antecedent of arterial hypertension (48.55%), the most used stents group were the laser cut stents, the most used among these was the solitaire (54.95%). Hydrocoils were used in 66.89% of the patients and in-stent angioplasty was performed in 6.12%.

Conclusion Treatment of patients with intracranial aneurysms with laser-cut stents or braided stents and coils is just as safe and effective.

Disclosure of Interest Nothing to disclose

P084/238 PEGASUS (HPC) FLOW DIVERTE STENT: PRELIMINARY RESULTS FROM A SINGLE CENTER EXPERIENCE

Arianna Rustici*, Ciro Princiotta, Massimo Dall'olio, Caterina Tonon, Raffaele Lodi, Luigi Cirillo. IRCCS Istituto delle Scienze Neurologiche di Bologna, Bologna, Italy; *Live Presentation

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Introduction The use of flow diversion devices to treat intracranial aneurysms has recently increased.

Aim of Study Assess the safety and efficacy of the pEGASUS (HPC) FD device.

Methods Between May 2022 and May 2023, we retrospectively identified all patients treated with pEGASUS (HPC) FD at our center. Aneurysms located in the anterior and posterior circulation were included, as well as previously treated aneurysms; no previous parent vessel stent-treated aneurysm were included. All patients underwent a combination of coiling and FD treatment. Imaging FU included a MR-angiography (MRA) at 2 days and at 3–6 months after treatment. Our primary safety endpoint was the incidence of complications and mortality at follow-up, with the primary efficacy endpoint being complete aneurysm occlusion on follow-up.

Results 15 patients underwent treatment, the mean aneurysm dome width was 6.7 ± 1.5 mm and neck width 4.9 ± 1.4 mm. Adjunctive coiling was performed in all patients with jailing technique (42.8%), direct crossing of the FD (28.6%) and subsequent FD deployment after coiling (28.6%). There were no intraprocedural complications and on 3-months MRA FU a complete aneurysm occlusion (mRROC 1) was seen in 22.3%, a mRROC 2 in 66.7%, and a mRROC 3a/b in 11.0%. In our series at 3 months FU the mortality rate was 0%.

Conclusion In our small case series, the pEGASUS (HPC) FDs appears as an effective and safe device for intracranial aneurysm treatment, with a high aneurysm occlusion rate with a single device and a low mortality rate at 3-months FU. Long-term FU data are pending.

Disclosure of Interest I have nothing to disclose

P085/243 FLOW DIVERSION FOR MCA BIFURCATION ANEURYSMS – LESSONS LEARNT OVER 5 YEAR EXPERIENCE

Harris Hameed*, Paul Maliakal, Aubrey Smith. Hull Royal Infirmary, Kingston upon Hull, UK

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Introduction Herein, we present our results of flow diversion at MCA bifurcation reporting complications, occlusion rates and lessons learnt over course of 5-year period.

Methods MCA bifurcation aneurysms treated by flow diversion were included. Data was collected retrospectively about patient demographics, aneurysm characteristics, previous treatments and follow-up findings. Outcomes assessed included angiographic occlusion, fate of jailed branches and procedural complications.