SAFETY AND EFFICACY OF THE FOURTH-GENERATION ACANDIS ACCLINO FLEX PLUS STENT IN MANAGING COMPLEX INTRACRANIAL ANEURYSMS

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Introduction The Acandis Acclino Flex Plus (AFP) is a flexible, fourth-generation microstent designed to treat a wide range of aneurysms. It can be delivered through 0.017" microcatheters with stent diameters up to 5.5 mm.

Aim of Study To present our single-center experience with the AFP stent in the treatment of complex aneurysms.

Methods The AFP was used in 28 patients with 28 aneurysms. A retrospective analysis was performed to evaluate aneurysm characteristics, technical success, complications, clinical outcomes and angiographic results.

Results The cohort included 8 untreated unruptured aneurysms, 9 recurrent untreated aneurysms and 12 ruptured aneurysms (diameters: 3 – 23 mm). The most common location was the anterior communicating artery (52%). Successful stenting was achieved in 28 cases (97%), with an average of 1.3 stents per aneurysm. The overall procedural complication rate was 17%, including two major clinical events (6.8%, an ischaemic stroke and an aneurysm perforation) and one minor clinical event (3.4%, a seizure). Follow-up angiographic results for 23 aneurysms at an average of 6 months post-procedure showed complete occlusion in 74%, neck remnants in 13% and aneurysm remnants in 13%. Three patients required retreatment.

Conclusion The AFP stent demonstrated feasibility and favourable safety and efficacy in the treatment of complex aneurysms. These results support its clinical use and highlight the need for further studies to evaluate its performance in different aneurysm subtypes and to determine its specific role in the endovascular treatment of aneurysms.

Disclosure of Interest CK serves as consultant for Acandis GmbH (Pforzheim, Germany) and proctor for MicroVention Inc./Sequent Medical (Aliso Viejo, CA, USA). David Zopfs is on the speaker’s bureau of Philips (Amsterdam, the Netherlands) and lecturer for Amboss GmbH (Cologne, Germany).

COMPARATIVE ANALYSIS BETWEEN A SECOND-GENERATION (ACANDIS ACCLINO) AND A FIRST-GENERATION (ENTERPRISE) STENT SYSTEM

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Aim of Study This two-centre trial aims to directly compare the low-profile Acclino stent (Acandis) – a second-generation stent – with the first-generation Enterprise stent (Johnson & Johnson/Cerenovus).

Methods Patients who received Enterprise or Acclino stents for untreated aneurysms were followed for 8 years. Complications, clinical and angiographic outcomes were compared with the primary outcomes of ischaemic stroke incidence and mid-term occlusion rate. Propensity score adjustment was adjusted for group differences.

Results Both Enterprise and Acclino stents were used in the same number of cases (48 each). The analysis showed a higher incidence of thromboembolic complications in the Enterprise group (20.8% vs. 4.2%, HR: 6.6, 95%CI: 2.2–20.0, p=0.01, adjusted p<0.01) and a higher rate of major ischaemic stroke (6.3% vs. 0%, HR: 2.1, 95%CI: 1.8–2.4, p=0.08, adjusted p<0.01). However, there were no significant differences in mid-term or long-term angiographic outcomes, with procedural success rates of 83.3% and 75.0% for Enterprise and 89.2% and 75.9% for Acclino (both p>0.05). Retreatment rates were 10.4% in the Enterprise group and 4.2% in the Acclino group (p=0.42, adjusted p=0.10).

Conclusion Advanced stents offer reduced thromboembolic risk and comparable aneurysm occlusion to first-generation stents due to their flexible design and surface modification. These results support the clinical use of advanced stent systems, but further comparative studies are needed to conclusively evaluate the efficacy of看一看nor-assisted coiling with the Acclino stent and other systems.

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