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Haemorrhagic

EP01* SAFETY AND EFFICACY OF EPTIFIBATIDE FOR ENDOVASCULAR INTRACRANIAL ANEURYSM TREATMENT

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Introduction The rate of thromboembolic complications during endovascular aneurysm treatment remains at a relatively high rate of about 10%.¹ However, only 30% of these complications result in clinically symptomatic events. One effective group of drugs in treating and preventing embolic events are GP IIb/IIIa inhibitors.²

Aim of Study To report our results concerning safety and efficacy of eptifibatide in the prevention and treatment of thromboembolic complications in ruptured and unruptured aneurysms and develop a treatment algorithm.

Methods During a three-year period, 41 patients received eptifibatide at our institution during aneurysm treatment (23 patients (56%) with ruptured aneurysms). Reasons for eptifibatide treatment were: clot at the coil surface, clot prevention before stent placement and distal emboli. Presence of distal occlusion at the end of the procedure and intracranial hemorrhage were recorded as predictors of efficacy and safety.

Results Treatment indications were: clot at the coil surface in 27 (57%), prevention before stent placement in 10 (24%) and distal embolism in 4 cases (10%). Eptifibatide was given as arterial bolus in 5 (12%), as intravenous infusion in 7 (17%) and combined in 29 cases (71%). In 4 cases (10%), a distal occlusion persisted at the end of the intervention, one resulted in a symptomatic infarction (2%). In two patients (10%), intracranial hemorrhage occurred (one clinically silent bleeding and one fatal parenchymal hemorrhage (2%)).

Conclusions Based on our experience, we propose an algorithm for eptifibatide administration for endovascular aneurysm treatment based on patient characteristics as well as the postinterventional angiogram.

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Disclosure Nothing to disclose

EP02* PIPELINE EMBOLIZATION DEVICES FOR THE TREATMENT OF INTRACRANIAL ANEURYSMS (PEDESTRIAN), SINGLE CENTRE REGISTRY: LONG-TERM ANGIOGRAPHIC AND CLINICAL OUTCOMES FROM 1,000 ANEURYSMS

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Introduction Prospective studies have established the safety and efficacy of the Pipeline™ Embolization Device (PED) for treatment of intracranial aneurysms (IA)

Objective/Aim To investigate long-term outcomes from the Pipeline Embolization Devices for the Treatment of Intracranial Aneurysms (PEDESTRIAN) Registry.

Methods The PEDESTRIAN registry data was retrospectively reviewed, which included patients (March 2006–July 2019) with complex IAs treated with PED. Patients with unfavorable anatomy and/or recurrence following previous treatment were included and excluded those with acute subarachnoid hemorrhage. The primary angiographic endpoint was complete occlusion and long-term stability. Clinical and radiological follow-up was performed at 3–6 months, 12 months, and yearly thereafter.

Results A total of 835 patients (mean age 55.9±14.7 years; 80.0% female) with 1,000 aneurysms were included. Aneurysms varied in size: 64.6% were small (≤10 mm), 25.6% were large (11–24 mm), and 9.8% were giant (≥25 mm). A total of 1,214 PEDs were deployed. Follow-up angiography was available for 85.1% of patients with 776 aneurysms at 24.6±25.0 months (mean). Complete occlusion was demonstrated in 75.8% of aneurysms at 12-months, 92.9% at 2–4 years, and 96.4% at >5 years. During the post-procedural period, mRs remained stable or improved in 96.2% of patients, with stability or improvement in 99.1% of patients >5 years. The overall major morbidity and neurological mortality rate was 5.8%.

Conclusion This study demonstrated high rates of long-term complete aneurysm occlusion, stable or improved functional outcomes, and low rates of complications and mortality. Clinical and angiographic outcomes improved over long-term follow-up, demonstrating endovascular treatment of IA with PED is safe and effective.

REFERENCE

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Disclosure Dr Scrivano is a proctor in the use of the PED for Medtronic. Dr Lundquist is a proctor in the use of the PED for Medtronic. Dr Pedro Lylyk serves as a consultant/proctor for Medtronic and he received fees from Medtronic for lectures and for development of educational presentations. This project was supported by Medtronic through an unrestricted research grant.

EP03* INTENSIVE THERAPIES OF DELAYED CEREBRAL ISCHEMIA TARGETING VASOSPASM: A TWO-CENTER PROPENSITY-MATCHED STUDY

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Introduction Distal balloon angioplasty of cerebral vasospasm has promising preliminary results over conventional angioplasty with intraarterial infusion of vasodilator for treatment of delayed cerebral ischemia (DCI) in aSAH.