DERIVO 2 Embolization Device (DED2) is a new addition to the market and promises better radiopacity.1

Aim of study The purpose of this study was to evaluate the safety and efficacy of the DED2.

Methods We conducted a retrospective multicenter analysis at six interventional facilities. Patients with untreated or ruptured intracranial aneurysms were included. The primary objective was angiographic aneurysm occlusion at 6 months as measured by the OKM grading scale. Clinical outcome according to mRS was evaluated at 6 months, with major morbidity defined as mRS 3–5.

Results We included 37 patients treated with the DED2 between August 2020 and July 2021. Five patients had ruptured aneurysms. 27 patients were female, 10 male, with a medium age of 60. The median mRS was 0 (range 0–4). Average aneurysm size was 9.1 (7.9) mm, while average neck size was 6.8 (6.3) mm. In all cases the DED2 opened upon deployment. Thirty patients were eligible for clinical follow-up (81.1%). 25 (83.3%) had an mRS of 0 or 1, with no clinical deterioration in patients with pre-existing significant morbidity. Three patients died during the follow-up period, two of whom had ruptured aneurysms initially. Follow-up imaging was available in 27 patients (90%), with 23 (85.2%) demonstrating satisfactory aneurysm occlusion OKM grade C-D.

Conclusion The DED2 is both safe and effective in the treatment of ruptured and untreated intracranial aneurysms.

REFERENCES

Do you have any conflict of interest to declare?: No

A CASE OF COIL-ASSISTED FLOW DIVERSION USING THE NEQSTENT ENDOSACCULAR DEVICE
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10.1136/neurintsurg-2022-ESMINT.28

New endosaccular device including Woven EndoBridge (WEB) and Contour has been developed to address the challenges faced in treating wide neck aneurysm. We report a case of embolization of wide neck MCA aneurysm using the Neqstent endosaccular device. This device is designed to cover the neck adequately while providing a scaffolding for subsequent coiling, and produces a degree of flow diversion, thus reduces the risk of neck recurrence and secondary occlusion of the parent vessel and its branches. Sizing of the device is straightforward requiring only the aneurysm neck, and absence of the need of post-embolization anti-platelet is seen favourable.

MULTICENTER OUTCOME STUDY OF THE PIPELINE VANGUARD FLOW DIVERTER
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10.1136/neurintsurg-2022-ESMINT.29

Introduction The recently introduced Pipeline Vantage Embolization Device With Shield Technology is the fourth generation of Pipeline flow-diverter devices. The device is manufactured from 48 or 64 drawn filled wires (DFT).1 DFT technology is intended to improve the opening characteristics of the stent. The pore density is higher than previous generations, intended to increase the flow diversion effect.

Aims of study Clinical (safety and efficacy) and radiographic evaluation of the new device.

Methods This was a multicentre retrospective series. The primary efficacy end point was aneurysm occlusion. The primary safety endpoints were new neurological deficit or death within 12 months.

Results 38 attempted procedures were performed for patients with 41 target aneurysms. 39 devices were inserted in total, with 90% in the anterior circulation and 10% in the posterior circulation. 1 device could not be inserted due to intraprocedural haemorrhage. 90% aneurysms were saccular; and 10% were fusiform. 29% of aneurysms measured > 10 mm. The mean aneurysm sac maximal diameter was 7.4 mm and the mean neck width was 3.7 mm. There was 1 death in the series relating to rebleeding of an acute aneurysm. 1 patient had an intraprocedural haemorrhage requiring craniectomy. 1 patient experienced an acute SCA infarct post-procedurally and 2 patients experienced delayed ipsilateral infarcts. The adequate occlusion rate was 78% at 5.8 months.

Conclusions In this non-industry-sponsored study, the occlusion rates and safety outcomes were similar to those seen in previously published studies with flow-diverter devices and earlier generation Pipeline Embolization Devices.

REFERENCE

Do you have any conflict of interest to declare?: No

DETECTION OF CEREBRAL ANEURYSMS IN UNENHANCED CT IMAGES OF PATIENTS WITH SUBARACHNOID HEMORRHAGE USING THE SPARING ANEURYSM SIGN (SAS)
10.1136/neurintsurg-2022-ESMINT.30

Introduction About 85% of the non-traumatic SAH are caused by ruptured aneurysms.1 Identifying those aneurysms as the bleeding cause is essential for further therapy.

Aim of study The study evaluates the detection of cerebral aneurysm in unenhanced CT images of patients with subarachnoid hemorrhage by a relative hypodense structure in the hyperdense bleeding, the sparing aneurysm sign (SAS).

Methods Three neuroradiologic experienced radiologists rated the aneurysm location and size by applying the SAS in 50 CT-examinations of patients with aneurysmal SAH who underwent an initial CT scan followed by a DSA. The results were analyzed for correlations between aneurysm location, aneurysm size, Fisher-score and the detectability of a SAS. Further a quantitative analysis of the average HU of the aneurysm and the SAH was performed.

REFERENCE

Do you have any conflict of interest to declare?: No