ICA luminal restoration was achieved in all cases. An average of 2 FDS were deployed telescopically to cover the dissection. Balloon angioplasty was performed in two cases to improve opening of the implant. Adjunctive carotid stents were deployed in all cases to secure the proximal end of the FDS. LVOs were addressed after ICA reconstructions by combined technique and ingestion of the stentriever in the aspiration catheter, that was advanced within the construct and positioned distally to it without issue in all cases (TICI scores: 2b-3). All patients received intra-operative eptifibatide, bridged subsequently to dual antiplatelet therapy (aspirin + ticagrelor). Acute, non-occlusive in-stent thrombus was noted in 2 cases, while wire access was lost in one case, significantly increasing operative time. Hemorrhagic transformation of an acute infarct was seen in 2 (33%) patients. A good outcome (mRS 0–2 at 90 days) was achieved in 5 (83%) patients, while one died of malignant brain edema shortly after intervention. Imaging follow-up was available for 4/5 surviving patients (80%; median: 18 months) and showed complete stent patency.

Conclusions FDS appear to be a safe and effective tool for reconstruction of a symptomatic dissection in tortuous cervical ICAs. Their flexibility allows conformation to complex anatomes and they can be traversed multiple times by aspiration catheters/stentriever. We found excellent patency at follow-up. The unique challenges posed by utilization of high-profile catheters/stentriever in the aspiration technique and ingestion of the stent with fewer thromboembolic complications with PED-Shield. In conclusion, the Pipeline Flex Embolization Device with Shield Technology (PED-Shield) was introduced to minimize thromboembolic complications. In this study, we investigated the safety and effectiveness of PED-Shield among all patients treated for intracranial aneurysms at our center.

Disclosures E. Orru: None. E. Scrivano: None. J. Lundquist: None. C. Bleise: None. N. Perez: None. R. Nella Castro: None. P. Lylyk: None. P. Lylyk: 2; C; Medtronic.