LVIS Jr

Intraluminal device from Microvention.

The lowest profile delivery system in coil embolization intraluminal support • 3 Flared Ends • Single Nitinol Wire Braid • Larger Compliant Cell System - Compliant 1.5mm cell size is 50% larger than standard LVIS device, and complements today's softer, smaller embolization coils • 3 Radiopaque Strands and 3 Distal / Proximal Markers

The LVIS® Jr. device may be tracked and deployed through a .017“ (0.43mm) inner diameter Headway®17 Advanced microcatheter or Scepter occlusion balloon catheter

*LVIS® Jr. has received HDE Approval

RX Only. Humanitarian Device: Authorized by Federal Law for use with bare platinum embolic coils for the treatment of unruptured, wide neck (neck ≥ 4 mm or dome to neck ratio < 2), intracranial, saccular aneurysms arising from a parent vessel with a diameter ≥ 2.5 mm and ≤ 4.5 mm. The effectiveness of this device for this use has not been demonstrated.

Wide necked bifurcation intracranial aneurysms have traditionally not been amenable to coil embolization with the use of a single stent due to the high risk of coil prolapse.

The treatment of wide-neck bifurcation cerebral aneurysms is challenging especially if at least one of the arteries arise from an obtuse angle. These wide-neck bifurcation aneurysms are difficult to treat with the usual balloon and Stent-assisted coiling, including Y stenting or double-barrel stent techniques.

Other available options include using current devices with the waffle cone or double waffle cone techniques.

Novel devices that are in development include intrasaccular devices and the barrel bifurcation vascular reconstruction device (Covidien).

Y-configuration double stent-assisted coil embolization ('Y-stenting') of this aneurysm type has been shown to have generally good clinical outcomes, although the technique is complex with various challenges described in the literature. The compliant and flexible closed-cell design of braided stents such as the LVIS Jr allows for the creation of a 'shelf' across the aneurysm neck sufficient to prevent coil prolapse. We describe this novel 'shelf' technique and present a small case series of LVIS Jr stent-assisted wide-necked bifurcation intracranial aneurysm coiling in eight patients. Our small, albeit important, case series demonstrates that the 'shelf' technique is feasible and safe with very good short-term clinical and angiographic outcomes, and may obviate the need for Y-stenting [1)].

Case series

LVIS Jr case series

Case reports

LVIS Jr case reports.

1)

Du EH, Shankar JJ. LVIS Jr 'shelf' technique: an alternative to Y stent-assisted aneurysm coiling. J Neurointerv Surg. 2016 Feb 4. pii: neurintsurg-2015-012246. doi: 10.1136/neurintsurg-2015-012246. [Epub ahead of print] PubMed PMID: 26847331.