

Neuroform

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Neuroform Atlas

Neuroform EZ

Surpass Streamline

Wingspan Stent System

Self-expandable stents have broadened the spectrum of endovascular treatment of [intracranial aneurysms](#). However, procedures involving double [stenting](#) in Y/X configurations carry a relatively high risk of procedural [complications](#).

Neuroform ATLAS

Neuroform Atlas stent can be deployed directly via gateway balloon for angioplasty and [stent placement](#) without the need for exchange maneuver required for [Wingspan](#) stent use.

The Neuroform ATLAS, the evolution of Neuroform EZ, is a [nitinol](#) self-expanding hybrid/open cell stent which can be delivered through a low profile 0.017-inch catheter. Ciccio et al. presented the experience in the treatment of intracranial aneurysms with this stent in Y and X configurations.

They prospectively maintained a [database](#) from consecutive patients who underwent double stent-assisted coiling with the Neuroform ATLAS, from July 2015 to February 2019. Clinical and angiographic results were analyzed.

55 patients harboring 55 bifurcation aneurysms were treated with double stenting: 52 'Y' configurations, 3 'X' configurations. Deployment was successful in all cases. Post-treatment control angiography showed complete occlusion in 33 cases (60%), neck remnant in 8 cases (14.5%), and incomplete occlusion in 14 cases (25.4%). The overall symptomatic periprocedural complication rate was 12.7%. 38 aneurysms underwent follow-up (69%, mean duration 16 months): 33 aneurysms (87%) were completely occluded, 3 aneurysms (8%) had a neck remnant, and 2 aneurysms (5%) were incompletely occluded.

The Neuroform ATLAS is an effective device for the treatment of bifurcation aneurysms, allowing good conformability, a high level of navigability, and easy mesh crossing to perform Y/X stenting procedures. The rate of procedural complications remains non-negligible, and an indication for a double stenting procedure should be carefully discussed in a multidisciplinary meeting ¹⁾.

Neuroform EZ® Stent System

This [stents](#) manufactured by [Boston Scientific](#) for [Stryker](#) Neurovascular.

Flexible Design - Enhanced Delivery Introducing the industry leading self-expandable and conformable stent design with a simplified delivery system. By reducing stent delivery to three steps - Access, Advance, Deploy - enhanced control meets efficiency.

Used for [stentassisted coiling](#) of [wide necked aneurysm](#).

The Neuroform stent seems to be safe and technically effective in the endovascular management of distal cervical and intracranial dissections, with favorable clinical outcomes ²⁾.

References

¹⁾

Ciccio G, Robert T, Smajda S, Fahed R, Desilles JP, Redjem H, Escalard S, Mazighi M, Blanc R, Piotin M. Double stent assisted coiling of intracranial bifurcation aneurysms in Y and X configurations with the Neuroform ATLAS stent: immediate and mid term angiographic and clinical follow-up. J Neurointerv Surg. 2019 Jul 27. pii: neurintsurg-2019-015175. doi: 10.1136/neurintsurg-2019-015175. [Epub ahead of print] PubMed PMID: 31352373.

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Ansari SA, Thompson BG, Gemmete JJ, Gandhi D. Endovascular treatment of distal cervical and intracranial dissections with the neuroform stent. Neurosurgery. 2008 Mar;62(3):636-46; discussion 636-46. doi: 10.1227/01.NEU.0000311350.25281.6B. PubMed PMID: 18301346.

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