145-PATIENT EXPERIENCE OF NEVA IN FIRST-LINE USE

PAPER: First pass results of mechanical thrombectomy with two-drop zone NeVa™ device

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BACKGROUND:
Occlusive thrombi in acute ischemic stroke can be in various types which limits the success of the thrombectomy. The NeVa™ (Vesalio, Nashville, Tennessee) thrombectomy device was originally designed for all types of clot. Our aim was to evaluate the efficacy and safety of the NeVaTM device for mechanical thrombectomy.

METHODS:
Retrospective review of prospectively collected mechanical thrombectomy database revealed 145 patients who had fullfilled the inclusion criteria. The data collected includes clinical patient characteristics, procedural measures, timestamp at each stage, and patient outcome. IV thrombolytics application, pre and post-intervention imaging findings, device related adverse event and any type of intracranial hemorrhage were recorded.

RESULTS:
There was female pre-dominance (54.5%).
Median presenting national institutes of health stroke scale (NIHSS) was 16 (IQR, 3–32).
88 MCA-m1 (60,6%), 43 ICA-tip (29,6%), 11 MCA-m2 (7,5%), 2 ACA (1,4%) and 1 basilar (0,7%) occlusions underwent mechanical thrombectomy.
Median procedure time was 25 min (IQR, 7–136).
First-pass reperfusion scores were

- ➔ mTICI 0–2a 22.7%,
- ➔ mTICI 2b 23.4%,
- ➔ mTICI 2c 17.9%
- ➔ mTICI 3 35.9%

Final reperfusion scores were

- ➔ mTICI 2b-3 97.9%
- ➔ mTICI 2c-3 87.6%

Mean number of passes to achieve final recanalization was 1,84±1,14.
No device related adverse event occurred.
The mean 24-h NIHSS score was 6 (IQR 0–33

CONCLUSION:

In conclusion, the NeVa thrombectomy device offers a high rate of first-pass success along with favorable safety profile. Larger series and multi-center studies are needed for further investigation.

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