NeVa™

MECHANICAL THROMBECTOMY WITH THE NOVEL NEVA M1 STENT RETRIEVER: DO THE DROP ZONES REPRESENT A RISK OR A BENEFIT?

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Single site experience: retrospective analysis of 29 consecutive patients M1 occlusions treated with the NeVa™ M1 (4.0 x 30 mm) device.

Baseline Information – 29 Patients

Mean Age (IQR):	77 (70.5-85.5)
Gender (Female/Male):	55.2%/44.8%
Median NIHSS (IQR):	16 (12 - 21)
Occlusion Location:	18 (62.1%) proximal M1 11 (37.9%) distal M1
IV-tPA administered in:	24 (82.8%)

Procedure Information / Workflow Data

- The cases were done using co-aspiration
- Median times from:

onset/TLSW to groin puncture:	190 min
groin puncture to recanalization:	29 min

Recanalization Results

*NeVa used as primary device in 27 of 29 patients:

1st-pass results

TICI 2B/3	TICI 2C/3	TICI 3
16/29*	14/29*	11/29*
55.2%	**48.3%**	**37.9%**

2nd-pass results

TICI 2B/3	TICI 2C/3	TICI 3
23/29	18/29	15/29
79.3%	**62.1%**	**51.7%**

3rd-NeVa Pass

TICI 2B/3	TICI 2C/3	TICI 3
25/29	20/29	17/29
86.2%	**69.0%**	**57.1%**

Final results

TICI 2B/3	TICI 2C/3	TICI 3
29/29	21/29	18/29
100%	**72.4%**	**62.1%**

- Median no. of NeVa passes: 1 (IQR:1-3)
- Median no. of passes for final recanalization: 2 (IQR: 1 – 3.5)
- NeVa was used as rescue device in 2 cases and rescued in 2 cases

Patient Outcomes & Safety Data

Discharge NIHSS – Median (IQR):	**12 (4 – 19.5)**
Discharge mRS ≤ 2:	**24.1%**
90-day mRS ≤ 2:	**31.0%**
In-hospital mortality:	**20.7%**
90-day all cause mortality:	**24.1%**

Intra-procedural complications n, (%):

- Symptomatic ICH (PH2): 1 (3.4%)
- A-symptomatic ICH:
  HI1: 11 (37.9%), HI2: 3 (10.3%), PH1: 2 (6.9%)
- SAH: 1 (3.4%)
- Vasospasm: 14 (48.3%)
  did not translate into worse clinical outcome.
- Dissection: 1 (3.4%)

From the "Conclusion"

NeVa provides high rates of successful first-pass and final reperfusion. Its specific design is effective against hard, resistant clots, which may be failed by conventional stent retrievers.

In our cohort, we observed comparably high vasospasm rate related to thrombectomy, which could be related to the high radial forces of NeVa. However, procedural vasospasm did not translate into a poor clinical outcome.

Further safety and efficacy evaluations will be required to draw a definite conclusions...

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