

Carotid Anchoring Using Mo.Ma In Complex Supra-aortic Anatomies: Results From 41 Consecutive Carotid Stenting Cases

A. Froio, S. Pasquadibisceglie, F. Ballabio, L. Rossi, A. Melloni, G. Deleo
Vascular Surgery – San Gerardo Hospital, Monza
University of Milano – Bicocca

Background: vessel tortuosity and risk of failure during carotid stenting

Measurement and impact of proximal and distal tortuosity in carotid stenting procedures

Gianluca Faggioli, MD,^a Monica Ferri, MD,^a Mauro Gargiulo, MD,^a Antonio Freyre, MD,^a Francesca Fratesi, MD,^a Lamberto Manzoli, MD,^b and Andrea Stella, MD,^a *Bologna and Chieti, Italy*

Proximal tortuosity increases the risk of technical failure due to the slipping of the system

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CLINICAL INVESTIGATION
Risk Factors and Complications Associated with Difficult Retrieval of Embolic Protection Devices in Carotid Artery Stenting

Severe distal carotid tortuosity can:
- reduce filter trackability to the distal ICA
- reduce the apposition of the filter to the wall
- cause a difficult retrieval of distal filters

Hypothesis

The Mo.Ma system could provide a proximal cerebral protection with the two balloons anchoring the system to the ECA and CCA.



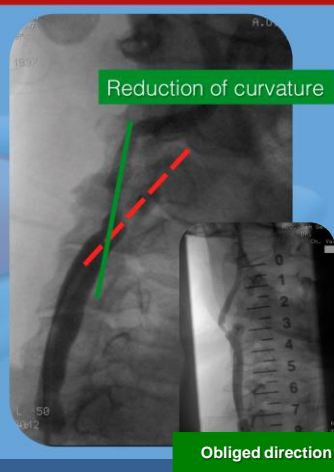
Endpoints

Aim of the study is the assessment of safety and efficacy of the Mo.Ma system in complex anatomies:

- type 2 and 3 aortic arch and
- severe tortuosity (>60°) of supra-aortic trunks.

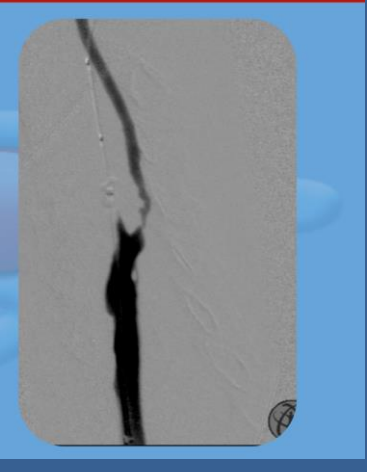
Technical issues #1: cannulating the ICA

1. The stiffness of the Mo.Ma system reduce the take-off angle of the ICA
2. The balloon at the ostium of ECA obliges the 0.014" guidewire to advance into the ICA.

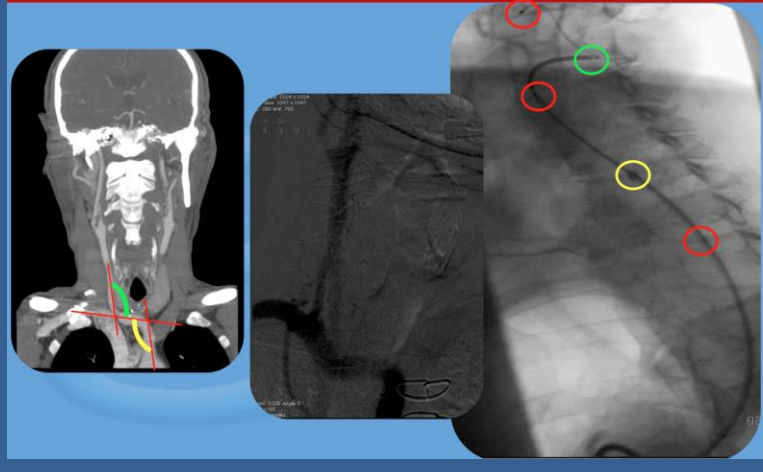


Technical issues #2: the ECA balloon

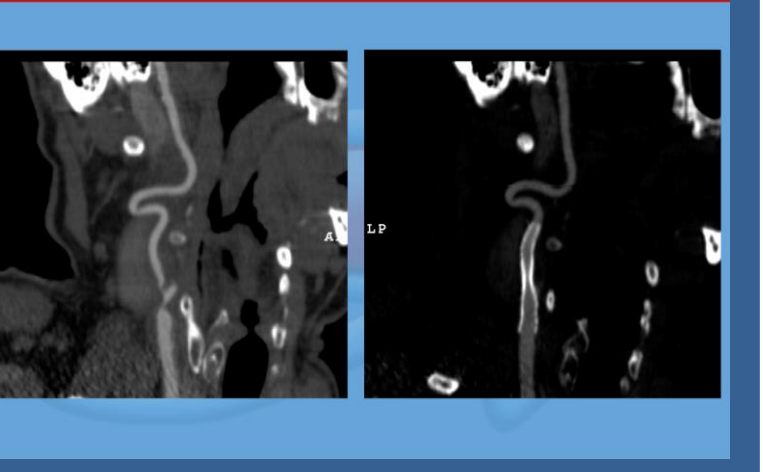
3. ECA occlusion increases the radio-opacity of the ICA
4. The ECA balloon is a marker to precisely deploy the stent



Tech Issue #3: Proximal Tortuosity & Supracore



Technical issues #4: distal tortuosity



Results #1

Patients enrolled:	41
Type 2 and 3 arch :	30/41 (73%)
Severe tortuosity :	19/41 (46%)
Mo.Ma positioning:	41/41 (100%)
ICA cannulation < 30 sec:	41/41 (100%)
Slipping of the system:	0/41 (0%)

Results #2

Clamping time :	7±3 min
Fluoroscopic time :	17±10min
Clamping intolerance:	1/41 (3.3%)
Technical success:	41/41 (100%)

Results #3

TIA	2/41 (4.8%)
Stroke	0/41 (0%)
Death	0/41 (0%)
30-day combined death & stroke	0/41 (0%)

Conclusions

The Mo.Ma-induced anchoring allows a safe and quick treatment of complex anatomies.

