Management of patients with tandem carotid occlusion undergoing endovascular thrombectomy for anterior circulation stroke: an international survey of stroke physicians

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BACKGROUND

- The term “tandem occlusion” refers to an acute occlusion of the middle cerebral artery (MCA) and/or distal internal carotid artery (ICA) AND concurrent stenosis or occlusion of the ipsilateral cervical ICA.
- In acute stroke due to tandem occlusion, the benefit of acute endovascular treatment of the cervical ICA lesion in parallel to standard intracranial thrombectomy is uncertain¹.
- We proposed an online survey to determine current practice patterns and whether community equipoise existed.

METHODS AND AIMS

- A brief online survey was distributed to stroke physicians and neuro-interventionalists affiliated with the Canadian stroke Consortium, the Canadian Interventional Neuro Group, Society of Vascular and Interventional Neurology, and international ESCAPE trial collaborators.
- Questions were based on clinical scenarios and provided multiple-choice answers across a Likert-type scale. The survey was sent out in early fall of 2017 and was closed after two months.

RESULTS

- 162 respondents completed the survey during the study period.

CONCLUSION

Our international survey suggests variability in practice and the existence of community equipoise which justifies a randomized clinical trial evaluating the use of acute ICA stenting in patients with tandem occlusion undergoing thrombectomy. In fact, 58,3% of respondents would consider taking part in a trial looking specifically after the management of tandem occlusion during thrombectomy.

RESULTS

- EQUIPOISE**
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Response	Percentage
Yes	52%
No	23%
Uncertain	23%
- Why some physicians avoid stenting ?
 - Risk of intracranial hemorrhage (71%)
 - Possibility of acute stent thrombosis (54,2%)
 - Absence of evidence (53,5%)
 - Why some physicians favor stenting ?
 - To facilitate intracranial recanalization (59,4%)
 - To immediately prevent further embolization (58,7%)
 - Among respondents using extracranial stenting at least rarely, several factors were brought up as influencing behavior when facing acute tandem occlusion.

PRE-PROCEDURE	<ul style="list-style-type: none">• Less inclined to use stenting If TPA was used (33%)• More inclined to revascularize if collateral flow insufficient (51%)• More inclined to revascularize with increasing severity of stenosis (only 2,1% with a 50-69% stenosis)
PER-PROCEDURE	<ul style="list-style-type: none">• Retrograde approach (70,8%) > anterograde approach (15,7%)• Balloon angioplasty alone (41,6%)
POST-PROCEDURE	<ul style="list-style-type: none">• Dual antiplatelet (69,1%)• GPIIb/IIIa inhibitors (23,1%)• Single antiplatelet for 24-28h followed by dual antiplatelets (23,1%)