

Carotid surgery in patients with contralateral occlusion: no shunt or endovascular.

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Disclosure

Speaker name:

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I have the following potential conflicts of interest to report:

- Consulting
 - Employment in industry
 - Stockholder of a healthcare company
 - Owner of a healthcare company
 - Other(s)
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- I do not have any potential conflict of interest

Objective

to evaluate and to compare the results of treatment in patients with contralateral occlusion of internal carotid arteries (ICA)

How to choose

- Texakalidis P. et al. report: Patients with contralateral carotid occlusion (CCO) can safely undergo both CAS and CEA with similar risks of stroke, MI, and MACE¹
- Cheng W. et al. report: The presence of CCO results in higher rate of preoperative symptoms and increases perioperative risk of neurological complications in CEA, but do not have a significant impact on the perioperative mortality rate and the stroke-free survival rate at 5 years
- Pascot et al. report: The use of a shunt and presence of ipsilateral vertebral stenosis are risk factors for perioperative embolism
- And many other controversial papers...
- Surgeon's experience
- Anesthesiologic support

1. Texakalidis, P. et al. Carotid Artery Endarterectomy Versus Carotid Artery Stenting for Patients with Contralateral Carotid Occlusion: A Systematic Review and Meta-Analysis. *World Neurosurgery* 120, pp. 563-571.e3.

2. Cheng W. et al. Influence of Contralateral Carotid Occlusion on Outcomes After Carotid Endarterectomy: A Meta-Analysis. *JOURNAL OF STROKE & CEREBROVASCULAR DISEASES*. 27 :10:2587-2595 , 2018

3. Pascot, Rémy et al. Predictive Factors of Silent Brain Infarcts after Asymptomatic Carotid Endarterectomy. *Annals of Vascular Surgery* , Volume 51 , 225 – 233. 2018

Materials and methods

Characteristics	CEA (n=15)	CAS (20)	p
Age, y, mean	59		-
Coronary artery disease	6 (40 %)	13 (65 %)	NS
Arterial hypertension	12 (80 %)	17 (85 %)	NS
Diabetes	5 (33.3 %)	2 (10 %)	NS
Hyperlipidemia	11 (73.7 %)	15 (75 %)	NS
Smoking	10 (66.6 %)	14 (70 %)	NS

- Asymptomatic >65% ICA (28 pt/80%)
- Symptomatic >50% ICA (7 pt/20%). mRS <2
- and only overall 20% with different kinds of Willis circle incompetence*

Panem et circenses...

Juvenal, 1st century

Crucial points

- Suitable to any technique
- Willis circle completeness
- Vertebral arteries and external carotid arteries condition
- “Matas” intraoperative testing (retrograde blood pressure in ICA)
- Cerebral oximetry

Results

For CEA



flow in a

er cathet



22-Val: 2990
WW: 4095 [D]

Conclusion

- Shunt use isn't mandatory in carotid surgery
- Presence of risk factors, neurological status, anatomy of CA affect to the choice of tactics of surgical treatment
- CAS is method of choice
- We suppose experience of any clinic is no less important factor

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