Another Balanced View: When Is Early CEA After Symptom Onset In Patients With Carotid Stenosis Safe And Beneficial And When Is It Not

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Disclosures?

I have no financial disclosure to declare

- These are old data: some were operated on within 2 weeks, but hardly anyone < 48 h
- The stroke risk was higher < 2 weeks (6.9%) than between 2-4 weeks (5.7%)
- Modern medical therapy may have decreased the risk of recurrent stroke
- In Sweden 92.1% of all carotid procedures 2015 were for symptomatic disease

Median time to surgery has decreased over time in Sweden

- Variable introduced in May 2008
- 2009 12 days
- 2010 9 days

It is difficult to operate faster than a median of 7 days

- 2012 7 days
- 2013 7 days
- 2014 7 days
- 2015 7 days (5 in Uppsala)

80% are operated < 2 weeks after qualifying event in Sweden
Pros and cons of urgent CEA

- Lower natural stroke rate??
- More effective stroke prevention??
- Higher periop stroke risk?
- Less time to optimize:
  - Blood-pressure
  - Cardiac function
  - Statins and anti-platelets
  - Less experienced surgeons and anesthesiologists
  - Higher cost
  - Negative effects on treatment of other patients

Is it safe for the patient to be operated on urgently with CEA?

- Swedvasc May 2008 – May 2011, 2596 patients analysed by the research group in Gothenburg
- Although only 148 were operated within 48 hours this was the largest study on urgent CEA

Data from Innsbruck suggests that CEA < 48 hours is safe

- EJVES 2015, Rantner B et al:
  - 4.4% 0-2 days (9/206)
  - 1.8% 3-7 days (4/219)
  - 4.4% 8-14 days (6/136)
- But the trend is similar to that in Sweden, lower 3-7 days, type-II error?

Is it necessary to operate < 48 h?

- Recurrent stroke was 2.0% <48 hours
- Only another 0.4% between 2-7 days!
- Offset against a higher stroke risk after emergent CEA (<48 h)
- Amarenco et al. One-Year Risk of Stroke after TIA or Minor Stroke NEJM 2016

When is emergent CEA necessary?

- Multiple TIAs
- Floating thrombus
- Stroke in evolution?
When is emergent CEA (<48h) safe?

• In major stroke centres, such as Innsbruck or Leicester?
• Those results may also be a result of type-II error and of publication bias?
• You need a multidisciplinary team 24/7
• Blood-pressure control, statins, etc

Conclusions

• If well organised you can operate the patient within 7 days in most cases
• Modern data suggest that the risk of recurrent stroke is lower than previously reported
• If you plan to operate within 48 hours, you must monitor your results carefully