HYBRID CAROTID ANGIOPLASTY WITH TRANSCERVICAL OPEN ACCESS: A FEASIBLE OPTION FOR CHALLENGING ANATOMY

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INTRODUCTION

- Failure of carotid angioplasty (CAS) is commonly due to aortic arch impairment
  - Type II or III arch
  - Arch elongation
  - Severe atheroma
  - Ostial stenosis
  - Severe tortuosity

- Impracticable femoral or radial/brachial access (anatomy or disease)
  - Severe tortuosity or sharp curves
  - PAD

- Alternative routes may overcome these barriers
  - Direct puncture: high complication rates – 2 - 5.3%

Lee et al., 2018
INTRODUCTION

AIM: Open surgical transcervical access (surgical cutdown technique) as an option for challenging anatomy
CASE REPORT

- Female
- 85 y. o.
- Symptomatic (previous TIA)
- ca. 60% stenotic right ICA plaque
- Submitted previously to two unsuccessfully attempts (transfemoral and transbrachial routes) of CAS
CASE REPORT

• NO complications
• NO neurological intercurrences
• Discharged at 3rd post-operative
DISCUSSION

- New MRI lesions higher in CAS patients (50% x 17% in endarterectomy)
  
  Bonati et al., 2010

- Contralateral hemispheric lesions were found in CAS patients, but not in endarterectomy patients. Higher incidence in transfemoral CAS.
  
  Palombo et al., 2012
  Leal et al., 2010

- Aortic arch calcification and carotid ulceration are linked to higher risk of embolism during CAS (elderly)

  Kastrup et al., 2008
  Faggioli et al., 2009
DISCUSSION

- Challenging anatomy for dissection
- Minor complication – 2.9%
  - Hematomas – respiratory insufficiency
  - Nerve lesions
  - Vessel dissection
  - Embolism
- Major complications
  - TIA – 2.7%
  - Stroke – 1.2%
  - Death – 0.41%
DISCUSSION

➤ Advantages
  ➤ Quick access to the CCA
  ➤ More straight routes to the ICA
  ➤ Use of larger profile devices with less risk
  ➤ Safer closure
Common carotid surgical cutdown technique is a feasible access option for hostile aortic arch and ostial lesions for CAS with low incidence of complications and high success rates.
THANK YOU
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