VEITHsymposium™
Current Optimal Management of Infected Carotid Patches Without and With Pseudoaneurysms

Session 83: New Concepts and Updates Related to Carotid Disease and Treatment
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Objectives

- To describe treatment options for infected prosthetic carotid patches
- To describe treatment options for infected carotid pseudoaneurysms

Outline

- Clinical Cases
  - Infected carotid patch
  - Head and neck cancer
  - Suppurative internal jugular thrombophlebitis
  - Retropharyngeal abscess
- Operative Tips

Case 1- Infected Carotid Patch

- 75 yo retired Dentist
- Purulent drainage and neck mass
- ENT evaluation for FNA
- CT
- Vascular consultation
  - Remote h/o right CEA with prosthetic patch
  - Chronic untreated dental infection

Financial Disclosure

- None

Infected Carotid Patch
Infected Carotid Patch
- Intraoperative image
- Chronic infection

Infected Carotid Patch
- Carotid open
- Forceps holding the patch

Infected Carotid Patch
- Probe in the sinus
- Extends to the patch

Infected Carotid Patch
- Excision and debridement
- Common-internal carotid bypass with vein (not reversed!)
- Can be performed over a shunt
- External carotid ligated

Case 2- Carotid Pseudoaneurysm
- 67 yo man
- Recurrent laryngeal cancer
- Intraoperative consultation for hemorrhage
- Carotid artery encased by tumor
Carotid Pseudoaneurysm - Stage 1

- Hybrid OR
- Selective left carotid injection

Carotid Pseudoaneurysm - Stage 1

- Self-expanding covered stent

Carotid Occlusion Test - Part 1

- Neuroradiology
- Carotid balloon
  - Clinical assessment
  - Pharmacologic induced hypotension

Carotid Occlusion Test - Part 2

- Nuclear Perfusion Scan
  - Evaluate for subclinical hypoperfusion

Carotid Pseudoaneurysm - Stage 2

- Hybrid OR
- Carotid Occluder
  - 10 mm distal CCA

Carotid Pseudoaneurysm - Stage 2

- Hybrid OR
- Carotid Occluder
  - 10 mm distal CCA
  - 12 mm proximal CCA
Carotid Pseudoaneurysm- Stage 3

- Operative Exploration
  - Proximal and distal ligation
  - Excision of infected carotid pseudoaneurysm

Case 3- Suppurative Thrombophlebitis

- 43 yo man
- Cirrhosis
- IVDA
- Bleeding esophageal varicities
- Left neck mass

Case 3- Suppurative Thrombophlebitis

- Selective left carotid angiogram
- Proximal left internal carotid pseudoaneurysm

Case 3- Suppurative Thrombophlebitis

- Balloon expandable covered stents
  - 5 X 38 mm distally
  - 8 X 38 mm proximally

Case 3- Suppurative Thrombophlebitis

- Exploration
  - Internal jugular excised
  - Debridement
  - Closure without carotid ligation or resection

Case 4- Retropharyngeal Abscess

- 67 yo man
- Smoker
- Throat pain
Case 4 - Retropharyngeal Abscess

- Large left neck phlegmon
- Left carotid pseudoaneurysm

Case 4 - Retropharyngeal Abscess

- Selective angiogram

Case 4 - Retropharyngeal Abscess

- Successful balloon occlusion test
- Common carotid occlusion

Case 4 - Retropharyngeal Abscess

- Exploration
- Resection of the carotid bifurcation
- Debridement
- Drainage of the abscess

Operative Tips

- Wide Exposure
- Topical Antibiotics
- Soft Tissue Coverage

Operative Tips

- Wide Exposure
  - T-shaped incision
Operative Tips

• Wide Exposure
  – Subplatysmal flaps

Operative Tips

• Wide Exposure
  – Lone Star ® Stays

Operative Tips

• Lone Star ® Stays

Operative Tips

• Topical antibiotics
  – Rifampin

Operative Tips

• Soft tissue coverage
  – Free flap
• Unsuccessful balloon occlusion test
• Radiated field

Operative Tips

• Soft tissue coverage
  – Free flap
Operative Tips

- Soft tissue coverage
  - Free flap

Carotid Infection Summary-1

- Presentation
  - Elective - chronic patch infection
  - Emergent - active hemorrhage

- Treatment
  - Endovascular - temporary or definitive
  - Operative
  - Combined

Carotid Infection Summary-2

- Carotid patch infections
  - Excision
  - Interposition vein graft

- Infected Carotid Pseudoaneurysms
  - Endovascular
  - Carotid Balloon Occlusion Test
    - Ligation and excision
    - Interposition vein graft
      - Flap coverage