FEMORAL ARTERY ENDARTERECTOMY STILL ‘GOLD STANDARD’

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THE TECCO STUDY
STENTING OR SURGERY FOR DE NOVO CFA STENOSIS

• The French TECCO study randomized 117 patients with de novo CFA stenosis to self expanding stents or open surgery.
• 86% of patients were claudicants
• Primary outcome: Modified intent to treat analysis (Patients who had undergone randomization and met the major inclusion criteria)

At 30-day, the combined rate of morbidity and mortality was 26% in the open surgical arm and 12.5% in the stent population (p=.05)

After a median follow-up of 24 months, the rates of primary patency, target lesion and sustained clinical improvement were similar in the two groups

THE TECCO STUDY
APPLICABILITY IN CURRENT PRACTICE?

Morbidity-Mortality composite endpoint
• No mortality in both groups, but one stroke in the endovascular arm
• Minor complications in the surgical arm: hematoma, delayed wound healing, temporary lymphatic leakage, paresthesia.

Follow-up
• Small study not powered to assess secondary endpoints
• Only 46 patients were available at 24 months for analysis

Length of stay?
• 3.2 days in the stent group and 6.3 days in the open group

Endovascular treatment of the CFA in the Vascular Quality Initiative

• 1014 patients with isolated CFA ± DFA endovascular interventions
• Claudication 67%, rest pain 16%, tissue loss 17%
• Postoperative LOS 1.5 days [1-3.5]
• Complications
  • 30-day mortality
  • Access site hematoma
  • Arterial dissection
  • Distal embolization and access site occlusion
  • Arterial perforation
  • 1.6% of 5.2% 2.9% 1.2% 0.6%

Endovascular treatment of the CFA in the Vascular Quality Initiative

• Mostly claudicants
• Low periprocedural complications and mortality
• Short follow-up
• High reintervention rate and amputation in patients with rest pain and tissue loss
• Stent implantation (35%)
OPEN SURGERY IN OUR PRACTICE

MATERIAL AND METHODS
- Retrospective study of 149 CFA open revascularizations in consecutive patients
- Claudicants 55%, rest pain in 28% and foot tissue loss in 17% (WIfI grade 3)
- Occlusive disease of the popliteal artery and infrapopliteal arteries graded according to the GLASS score

30-DAY RESULTS
- 30-Day primary patency was 98% (3 occlusions)
- 30-Day mortality was 1.7% (n=3)
- 30-Day cardiovascular complications in 1.4%
- Groin wound complications occurred in 5% (n=7)
- In multivariate analysis, only foot tissue loss + infection (WIfI 3-4) was a predictive factor for wound complications (HR:3.2, p=.03)

OPEN SURGERY IN OUR PRACTICE

LONG TERM RESULTS (Median follow-up 65 months)

CLAUDICANTS
- Primary patency at 5 years was 90%
- Limb salvage at 5 years was 95%
- Active smoking was a risk factor for restenosis (p=0.03)

REST PAIN AND GANGRENE
- Primary patency at 5 years was 80%
- Limb salvage at 5 years was 70%
- Occlusion of the popliteal and infrapopliteal arteries and (WIfI 3-4) were risk factors for amputation (HR 4.2, p=0.001)

CONCLUSIONS
- Stenting of the common femoral artery and deep femoral artery is feasible and will stay but its durability is unknown
- In most cases, stenting of the CFA is covering or jailing out the deep femoral artery, a crucial artery in lower limb atherosclerosis, with the risk to lose all flow to the leg
- The CFA supports unique biomechanical stresses with torsion and flexion at the hip joint and is vulnerable to intimal hyperplasia and stent fracture
- Until now, open surgery is still the best option in most cases