How I do PEVAR

Zoran Rancic, MD, PhD
on behalf of Vascular Specialists @ UHZ
PEVAR Technique @ UHZ

• Identify potential troubles on CTA
  – Calcifications, atherome, stenosis

• US aided puncture

• High access site
  – 2 cm above Bifurcation
Technique @ UHZ

• Hospitalised patient
  – ≤ 14 Fr: 1x Proglide
  – ≥ 14Fr – 24 Fr: 2x Proglide
  – Kompressing dressing, no bed rest

• Out-patient
  – ≤ 14 Fr: 2x Proglide
  – ≥ 14Fr – 24 Fr: 3x Proglide (2+1)
  – Kompressing dressing, no bed rest
Technique @ UHZ

• Three Proglide Technique
  – Preclosing 10h-14h
Sheath removal
Technique @ UHZ

• Three Proglide Technique
  – Preclosing 10h-14h
  – Additional ProGlide 12h
Accessing a surgical graft

Predilatation with PTA balloon
Slight traction on sutures
Relax traction
Right side OK
GW removed- access sealed
Residual bleeding
Knot tightening
Again some traction for 2-5’
Relax traction – access sealed
Cutting the sutures
Looks good 😊
Bail out T&T 1: Cross knotting
Bail out T&T 2: Sealing stitch
Sealing stitch
Sealing stitch
Pulse control
Stich removed on 1. POD
Postoperative CTA
False aneurysm
After Thrombin injection/compression
Value of high femoral access
Outpatient Endovascular Aortic Aneurysm Repair
Experience in 100 Consecutive Patients

Mario Louis Lachat, MD,* Felix Pecoraro, MD,§ Dieter Mayer, MD,* Carole Guillet, MD,* Michael Glenek, MD,† Zoran RASIC, PhD, MD,* Christian Alexander Schmidt, PhD, MD,* Gilbert PIPPE, MD,† Frank Junior Veith, MD,* Jacques Blyen, MD,|| and Dominique Bettez, MD‡

Objectives: To present the safety, feasibility, costs, and outcomes of outpatient endovascular aneurysm repair (EVAR).

Methods: Two-center retrospective analysis of prospectively collected data on 100 consecutive elective outpatient EVAR cases (OePT EVAR). The primary outcomes were death, major vascular complications (bleeding or occlusion) requiring additional procedures, and the need for hospitalization.

Results: Death occurred in 3 patients, 2 due to complications of dialysis. Major vascular complications were observed in 5 patients, 3 of whom required additional procedures. The 30-day mortality was 4.0%. The hospitalization rate was 7.0% (0.0% of patients required hospitalization).

Conclusions: Elective OePT EVAR can be performed safely, provided certain criteria are fulfilled and specific precautions are taken. In this series, OePT EVAR morbidity was minimal, especially delusional symptoms, which did not occur. Finally, patient satisfaction was high and costs were lower than with standard inpatient EVAR.

Keywords: ambulant, day, endovascular aneurysm repair, EVAR, fast-track, outpatient, surgery

Conclusions

• PEVAR (ProGlide) possible and safe in most patients (>90%), but selection (CTA) and successful access (US) are key points
  – Secondary bleeding has not been observed in our experience
    • >200 transfemoral accesses

• Most sealing issues in PEVAR (ProGlide) can be managed without surgical cut-down
  – Proximal femoral access allows relining to cover femoral tear (loose ProGlide)
  – Cross-knotting and/or sealing stitch can generally achieve bleeding control
zoran.rancic@usz.ch