10 † Mid-term Results of Replacement of Synthetic Graft and Arterial Infection in the Groin with Femoro-popliteal Vein
Amanda J. Kravetz, MD
From: Department of Vascular and Endovascular Surgery, Mayo Clinic, Rochester, MN
Sponsored by: Manju Kalra, MD, Rochester, MN

OBJECTIVE: Infection of synthetic grafts or femoral arteries in the groin is a challenging problem to treat. Femoro-popliteal vein (FPV) is an ideal conduit but extensive replacement of infected aortic grafts with FPV has been associated with significant morbidity. The aim of this study was to evaluate early and long-term outcome of limited replacement with FPV of infected femoral arteries/grafts in the groin.

METHODS: Data from 37 patients who underwent excision of infected femoral grafts and replacement with FPV over an 18-year period from 1994 to 2012 were retrospectively analyzed.

RESULTS: Surgical intervention was performed in 41 limbs of 27 men and 10 women (mean age 67.5 years) at a median of 2.5 years following the original synthetic implantation (aortofemoral n=21, femorofemoral n=3, femoro-distal n=5, patch angioplasty n=2) or on average 22.2 days following cardiac catheterization (n=6), and one mycotic aneurysm. Presentation included draining sinus in 7, abscess in 4, persistent fevers in 6 and pseudoaneurysm in 10 (intact 4, ruptured 6). 61% (n=25) of patients underwent muscle flap cover of the FPV reconstruction. In hospital/30 day mortality was 5.4% (2/37); one from respiratory failure 20 days postoperatively, and the second a 93-year-old female after withdrawal of care at 24 hours. No patients required fasciotomy, and 5 wound hematomas required re-operation. Focal femoropopliteal vein thrombosis occurred in 5 limbs. Over a mean follow-up of 2.5 years (range 0.03 - 13.3) 11 patients died of unrelated causes at a mean of 3.7 years (0.2 to 10.6 years). Graft re-intervention was required in 7 patients during follow-up: 2 graft thromboses, 2 stenoses and 3 anastomotic false aneurysms. Apart from the latter there was no other suggestion of graft re-infection in any patient. Major limb loss occurred in 1 patient at 6 months in spite of a patent graft. Long-term FPV harvest morbidity included mild leg swelling in 10 patients.

CONCLUSIONS: Replacement of infected synthetic grafts/femoral arteries in the groin with FPV is safe and results in excellent limb preservation and freedom from re-infection. FPV should be considered the preferred conduit in good-risk patients with infection limited to the groin.