**Subclavian Artery Revascularization: Improved intermediate-term patency with open surgery compared to endoluminal therapy.** Wolford HY, Hsu J, Rhodes JM, Shortell CK, Illig KA, Waldman DL, and Davies MG. Division of Vascular Surgery, University of Rochester Medical Center, 601 Elmwood Avenue, Box 652, Rochester, NY 14642.

**Objective:** To compare endoluminal (ENDO) versus surgical (OPEN) treatment of atherosclerotic subclavian arterial disease at a combined vascular surgery and interventional radiology center.

**Methods:** We performed a retrospective analysis of consecutive patients treated for symptomatic subclavian arterial atherosclerotic occlusive disease from 1992 through 2004. Mean follow up was 2.6 years. Life Table and Cox proportional hazards analyses were performed as appropriate.

**Results:** Sixty-eight patients with a mean age of 63 years (range 42-82; 57% females) underwent 74 procedures, 30 ENDO (26 primary stents, 3 angioplasty only, 1 technical failure) and 44 open (37 bypasses and seven transpositions). Pretreatment differences were seen. The most common indications for operation in the OPEN and ENDO groups were arm (59%) and coronary (50%) ischemia, respectively ($p<.01$). Total occlusion was present in 36% vs. 13% of patients, respectively ($p<.01$). No deaths occurred within the 30-day perioperative period, and major complications were similar between groups (23% OPEN and 10% ENDO).

| | Open (n=44) | Endo (n=30) | |
|---|---|---|---|
| 2 year Primary Patency | 95±4 | 84±7 | P = .02 |
| 2 year Assisted Primary Patency | 100±0 | 84±7 | P < .01 |

Results expressed as percentages ± SEM

The OPEN group had significantly better patency compared to ENDO. No differences were seen in clinical outcome (defined as no recurrence of the presenting symptoms) at follow-up. No factor was identified that impacted survival, patency, or clinical outcome.

**Conclusions:** Therapy for subclavian arterial disease is safe, effective and is associated with durable clinical benefit. Endoluminal treatment has inferior patency compared with open surgery. Patients undergoing endoluminal therapy are often being treated for a different indication and disease severity than those treated by bypass.