distal PAD is associated with more adverse overall outcomes. The authors therefore sought to determine, through retrospective analysis of arteriograms, whether the general prognosis of PAD patients differs according to location of disease.

Patients who underwent a first digital subtraction arteriogram of the lower limbs at the authors’ institution between January 2000 and December 2005 were reviewed. Arterial stenoses >50% in diameter reduction were scored by two senior physicians. Up until April 2007, death, nonfatal myocardial infarction, stroke, and coronary and carotid revascularization were recorded. The primary outcome variable included all these events.

There were 400 PAD patients (75% male), with a mean age of 68.3 ± 12.3 years, who met qualifications for the study. Iliac disease was noted in 211 (52.8%) and infragenual disease in 344 (86.0%). Proximal PAD was associated with greater prevalence of male sex and smoking, whereas more distal PAD was associated with older age, diabetes, hypertension, and renal failure \( (P < .05) \). Follow up averaged 24 ± 23 months. After adjustments for age, sex, cardiovascular disease history and cardiovascular disease risk factors, critical leg ischemia status and treatments, event and survival curves differed according to PAD location \( (P < .03) \). Proximal PAD was associated with the worst prognosis, with a primary outcome hazard ratio of 3.28 and a death hazard ratio of 3.18 \( (P < .002 \text{ vs distal PAD}) \).

**Comment:** This is the first study to report a poorer overall prognosis in patients with aortoiliac disease compared with those with more distal PAD. An obvious limitation of this study is that only patients undergoing angiography were included. The information was therefore primarily derived from patients with severe vascular disease where some form of intervention was contemplated. The results of this study need to be confirmed in a more general population of patients with PAD. However, if these findings are confirmed, it could result in potential additional risk stratification of PAD patients according to which lower extremity arteries are affected.

**Two-Stage Basilic Vein Transposition—A New Approach for Pediatric Dialysis Access**


**Conclusion:** Rates of arteriovenous fistula (AVF) maturation and patency in pediatric patients are higher for two-stage basilic vein transposition (BVT) than for BVT performed in one stage.

**Summary:** BVT can be performed as a one-stage or a two-stage procedure. Advantages of a two-stage procedure are potential maturation of smaller veins before the actual transposition, thereby potentially improving ultimate success of the transposition. The two-stage procedure is technically easier than a one-stage transposition but does involve two separate procedures. The authors sought to determine whether using two-stage BVTs in children improves fistula maturation rates, fistula use, and overall patency compared with one-stage BVTs, other types of AVFs, and AV grafts. The study took place at two tertiary care children’s hospitals. Between 1997 and 2008, 81 patients underwent AV access creation. Forty-two access procedures were performed: 15 two-stage BVTs (36%), 13 one-stage BVTs (31%), 6 radiocephalic fistulas (14%), 3 brachiocephalic fistulas (7%), 1 brachiobrachial fistula (2%), and 4 AV grafts (10%). Average follow up was 20.4 ± 3.2 months for two-stage BVT and 47.9 ± 4.1 months for other AVFs. All two-stage BVTs matured, but only 14 of 27 (52%) other AVFs matured \( (P = .001) \). More two-stage BVTs (87%) were used for dialysis than other AVFs (48%, \( P = .024) \). The fistula failure rate in the two-stage BVT was 7% compared with 59% for other AVFs \( (P = .001) \). The patency at 1-year was 91% for two-stage BVT vs 47% for other AVFs \( (P = .003) \). The size of the basilic vein increased from 0.3 ± 0.027 cm before the performance of the first stage of the BVT to 0.79 ± 0.08 cm after the first stage of the two-stage BVT. Of the 16 failures in the other AVF group, 11 were primary failures occurring before attempted access. One case of steal syndrome occurred in the two-stage BVT group.

**Comment:** Establishing durable hemodialysis access is difficult in all patients and is particularly difficult in the pediatric population because of the overall small caliber of the vessels. Most of the patients in this study, however, were not small children but adolescents with reasonable size vessels to work with. It is therefore a bit unclear whether the apparent advantage of the two-stage BVT in these patients was due to converting a more difficult procedure to a less difficult procedure for performance by surgeons who do not perform large volumes of dialysis access surgery. Two-stage BVT requires two operations, but the first is a relatively small procedure. Given the big picture, there appears to be no great disadvantage to the two-stage procedure and there may be a significant advantage in pediatric patients. The authors’ contention that two-stage BVT should be preferred hemodialysis access in the pediatric population deserves consideration.