

## **Nutritional blood flow to the limbs after access procedures**

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### **Abstract**

We have measured the blood flow to skin and muscle in normal subjects, asymptomatic dialysis patients, and dialysis patients, and dialysis patients who complained of cold hands (symptomatic patients) in whom a radiocephalic fistula had been constructed. Mean skin blood flow in asymptomatic dialysis patients was identical to that in normal subjects. Skin blood flow in the fistula hand of symptomatic dialysis patients was greatly reduced but it was normal in the contralateral hand. Muscle blood flow at rest was lower in dialysis patients than in normal subjects, but was reduced still further in the fistula hand of symptomatic patients. Muscle hyperaemia in response to exercise was greatly impaired in the fistula hands of all patients, irrespective of symptoms. The haemodynamic consequences of arteriovenous fistulae may be a cause of pain, paraesthesiae, muscle wasting or claudication in dialysis patients.