

Dialysis

Vascular Access

7. Pre-operative clinical and radiological examination of arterial and venous systems

CARI Guidelines

- a. Planning for vascular access requires early consultation with a vascular surgeon. (level C evidence)
- b. Some patients will require vascular imaging depending on the basis of medical and surgical history and clinical examination (level C evidence).
- c. Where indicated, Doppler ultrasound and/or venography are recommended to define problems and facilitate surgical or radiological interventions (level C evidence).
- d. All patients with a history of subclavian vein cannulation should have imaging of the subclavian vein by Doppler ultrasound or venography before creation of vascular access in the ipsilateral limb (level B evidence).

What is the evidence?

Beathard GA. Physical examination of the dialysis vascular access. *Seminars in Dialysis* 1998; 11: 231-236. A review of clinical issues relating to access creation by an experienced surgeon.

What do the other guidelines say?

DOQI: To determine the type of access most suitable for an ESRD patient, a history must be taken and physical examination of the patient's venous, arterial, and cardiopulmonary systems must be performed. Diagnostic evaluations should be performed when indicated based on patient history or physical examination. (Evidence/Opinion)

BRA: Patients who have had subclavian catheters in the past should have venograms; Doppler ultrasonography of this area is not adequate.

CSN: To determine the type of access most suitable for an ESRD patient, the clinician should take the patient's history and perform a physical examination of the patient's venous, arterial, and cardiopulmonary systems. When indicated, the clinician should also order a diagnostic evaluation (opinion).

Suggestions for Future Research

RCT of routine pre-operative ultrasound venous mapping versus clinical examination and selective ultrasonography