VASCULAR ACCESS IN CHRONIC HAEMODIALYSIS

EDTNA/ERCA Recommendations for Renal Nurses

1

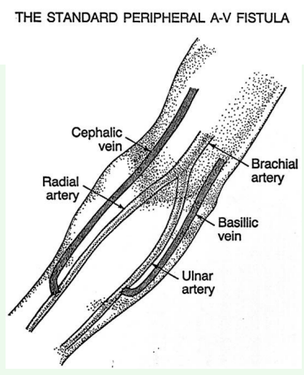
Arm vein protection

Arms veins suitable for placement of vascular access should be preserved at all times. The use of hand veins is recommended for venipunctures and IV injections.

2

Native vascular access

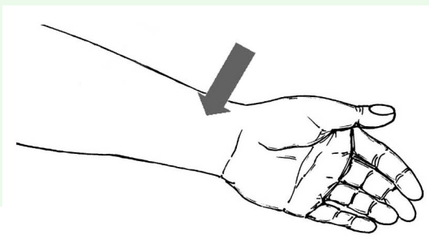
Native vascular accesses show the lowest complication rate compared to AV grafts and catheters. Renal nurses should insist on an AV fistula as first choice vascular access.



3

Forearm localization

In general, the forearm should be preferred as first choice location of a native vascular access.



4

Maturation time

A new fistula should be allowed to mature at least 6 weeks. Renal nurses should be alert to refer renal patients for surgery in due time for the construction of a vascular access.

5

Cannulation technique

Always use a preselected puncture technique:
- the rope ladder technique is recommended in forearm AV fistulae with a long vascular traject
- the button hole technique is preferred in short elbow, upper arm fistulae with some difficulties to cannulate.

6

High blood flow and needles

To achieve high blood flows, it will be necessary to increase the diameter and to decrease the length of the needle(s).

7

Catheters

The use of catheters as permanent vascular access should be avoided as much as possible.

8

Types of catheters

If a catheter is unavoidable, it is recommended:
- to use a tunneled catheter;
- to use a single lumen catheter in lean patients or in patients with some residual renal function;
- to be alert for signs and symptoms of central venous thrombosis.

9

Hygiene

For handling vascular accesses, standard hygienic precautions should be strictly respected. Particularly for connecting and disconnecting catheters, the use of masks by patients and nurses is recommended.

10

Vascular access observation

Observation of the vascular access by renal nurses should be performed at each dialysis session:
- before dialysis: physical examination;
- during dialysis: blood flow and dynamic arterial and venous pressures;
- after dialysis: physical examination and bleeding time at puncture places.

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