

EBPG on Vascular Access

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1. Patient referral

Guideline 1.1. An early plan for venous preservation should be a substantial part of pre-dialysis care and education in any chronic kidney disease (CKD) patient regardless the choice of treatment modality (Evidence level IV).

Guideline 1.2. Every chronic renal failure patient, who have opted for haemodialysis, should start dialysis with a functioning vascular access (Evidence level III).

Guideline 1.3. Potential chronic haemodialysis (HD) patients should be ideally referred to the nephrologist and/or surgeon for preparing vascular access when they reach the stage 4 of their CKD (glomerular filtration rate < 30 ml/min/1.73 m²) or earlier in case of rapidly progressive nephropathy or specific clinical conditions such as diabetes or severe peripheral vascular disease (Evidence level III).

Rationale

Early referral of CKD patients to the nephrologist and/or vascular surgeon is strongly recommended. This is to start a policy to preserve access sites and to allow adequate time for planning, creation and maturation of the vascular access. The planning stage involves examination and pre-operative vascular mapping. An autogenous fistula requires at least 6 weeks for maturation before it can be used. Additional time may be required for interventional or surgical revisions to enhance maturation. For these reasons, it is recommended that the fistula is created at least 2–3 months before the earliest likely date for starting haemodialysis. Prosthetic graft AVFs do not need a maturation period and can be cannulated 2–3 weeks after implantation. However, prosthetic graft AVFs are not recommended as primary vascular access. This approach is recommended to minimize the use of catheters and to reduce catheter-related morbidity and need for hospitalization. Early referral to the nephrologist is also required for psychological preparation for dialysis, discussion of all options for dialysis modality, interventions to delay progression of renal damage and to correct the hypertension, anaemia and metabolic effects of renal failure [1–5].

Recommendations for future research

Streamlining of early patient referral and organization of predialysis care are major subjects for research. A policy of venous preservation should be educated and implemented.

References

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