

Haemodialysis vascular access in a tertiary renal centre

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Aims

To determine the rate of arteriovenous fistula versus permanent central dialysis catheter use in haemodialysis patients in a tertiary renal centre, and to identify modifiable factors contributing to catheter use.

a dedicated vascular nurse in haemodialysis units to monitor fistula function and push for arteriovenous fistula use. ■

Methods

We determined the point prevalence of catheter and arteriovenous fistula use, over a 1-week period in December 2013, in all patients in our dialysis centre (including central and a satellite centre), who were on dialysis for more than 90 days. For patients dependent on catheters, we attempted to define the reasons for this in an effort to identify potentially modifiable factors.

Results

Our total sample size was 169 patients (98.9% of prevalent patients). Ninety-six (56.9%) patients were dependent on catheters for dialysis access. One patient had an arteriovenous graft (0.6%). We found no significant association between age, attending consultant or dialysis vintage and catheter use. More patients dialysing on the central site were dependent on permanent catheter than those on the satellite site (68.7% vs 45.4%, respectively). On multivariate logistic regression analysis, dialysis site was the only independent factor associated with catheter use (odds ratio 0.35, $p < 0.005$). Of the 84 catheter-dependent patients with > 6 months available to create a fistula, 16 (19%) had a potentially modifiable factor identified.

Conclusions

There was a higher arteriovenous fistula rate in the satellite centre compared to the central centre. Site of haemodialysis was the only independent predictor of vascular access. The high catheter frequency in the central unit is likely to be a composite of higher comorbidity, frailty, age and ease of access to vascular surgery. In order to improve overall fistula rates, we now have contemporaneous vascular access and low clearance clinics to aid the journey of arteriovenous fistula creation. We also have

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