

DETERMINANTS OF VASCULAR ACCESS – PATIENT CHARACTERISTICS OR PHYSICIAN PREFERENCE?

Megha Shah ¹, Vijay Jain ¹, Lori Spalding ², Wajid Choudhry ¹
(1-Unity Health System, 2- East View Dialysis Unit)

Rochester, NY, USA

As part of the Fistula First Initiative the goal for 2009 for the percentage of patients using arteriovenous fistula (AVF) for dialysis has been increased to 66%. However most facilities fall short of this target. The objective of this study is to determine the main factor influencing the choice of vascular access in patients.

This is a retrospective study on all 176 patients who received a new vascular access for hemodialysis over 18 months in a group of 3 hospital based dialysis units (120 patients), compared with a private dialysis unit (56 patients) which has been recognized for having one of the best fistula rate by New York State ESRD Network. Nephrologists and Surgeons in both the groups were separate.

A significantly higher number of patients received AVF as their primary vascular access at the private dialysis unit, despite no significant difference in co-morbidities, i.e. diabetes, coronary artery disease and peripheral vascular disease, in both the groups. There was no statistically significant difference in the two groups in primary and secondary fistula failure rates, i.e. failure of fistula to mature and failure after use.

	AVF rate (%)	DM (%)	CAD (%)	PVD (%)
Private unit	59.0	63.3	48.4	57.6
Hospital based units	28.8	51.6	70.9	70.9
p value	<0.001	>0.5	>0.5	>0.1

Our study shows that prevalence of AVF varies in different dialysis units, involving different providers. Although the co-morbidities in the studied groups of patients were similar, yet the private unit had a higher prevalence of working AVF. This implies the presence of bias amongst providers in Hospital based dialysis units when selecting a patient for type of access. Thus a higher rate of AVF placement, closer to the target rate, can be achieved by removing this bias.