

ARE VASCULAR ACCESS OUTCOMES IN THE FISTULA FIRST ERA AFFECTED BY THE SURGEON?

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The Fistula First Initiative recommends arteriovenous fistulas as the preferred vascular access. Although fistula prevalence has increased, an unintended consequence has been a concurrent increase in tunneled catheter prevalence. Measures of surgical decision making and outcomes should include, not only the proportion of fistulas placed, but also the duration of catheter-dependence due to access failure to mature. The purpose of this study was to evaluate the impact of surgical decision making on vascular access by comparing total duration of catheter dependence among the dialysis patients of 4 surgeons at a single institution.

Using a prospective, computerized vascular access database, we identified 168 HD patients undergoing vascular access surgery during an 18-month period. Each patient was followed by 1 of 4 experienced transplant surgeons from time of access surgery to either access failure or until the conclusion of the study period. The ratio of catheter dependent time to total patient follow-up time (CATH RATIO) was calculated for each patient. CATH RATIO was 1.0 for patients continuously catheter-dependent, and 0.0 for patients with no catheter-dependence.

CATH RATIO did not differ significantly among the 4 surgeons (0.76 vs 0.70 vs 0.65 vs 0.53, $P=0.62$). CATH RATIO did not differ between older (age ≥ 65) vs younger (age < 65) patients (0.73 vs 0.63, $P=0.45$). It did not differ between diabetic and nondiabetic patients (0.68 vs 0.64, $P=0.76$), or between obese (BMI ≥ 30) and non-obese patients (0.69 vs 0.64, $P=0.72$). However, CATH RATIO was significantly higher for females than for males (0.82 vs 0.51, $P=0.01$). The proportion of patients receiving a fistula as their first access was lower in females than males (31 vs 56%, $P=0.001$).

In conclusion, duration of catheter-dependence at our center was not associated with the surgeon, patient age, diabetes, or obesity. However, females had a longer duration of catheter dependence, despite having fewer fistulas placed during the study period.