The majority of incident hemodialysis (HD) patients initiate dialysis via catheters. We sought to identify factors associated with initiating hemodialysis with a functioning arterio-venous (AV) access” Goel et al (2017).

Abstract:
BACKGROUND: The majority of incident hemodialysis (HD) patients initiate dialysis via catheters. We sought to identify factors associated with initiating hemodialysis with a functioning arterio-venous (AV) access.

METHODS: We conducted a retrospective chart review of all adult patients, age >18 years seeing a nephrologist with a diagnosis of CKD stage 4 or 5 during the study period between 06/01/2011 and 08/31/2013 to evaluate the placement of an AV access, initiation of dialysis and we conducted a survey of providers about the process.

RESULTS: The 221 patients (56% female) in the study had median age of 66 years (interquartile range (IQR), 57-75) and were followed for a median of 1.26 years (IQR 0.6-1.68). At study entry, 81% had CKD stage 4 and 19% had CKD stage 5. By the end of study, 48 patients had initiated dialysis. Thirty-four of the patients started dialysis with a catheter (1 failed and 10 maturing AVFs), 9 with an AVF and 5 with an AVG. During the study period, 61 total AV accesses were placed (54 AVF and 7 AVG). A higher urinary protein/creatinine ratio and a lower eGFR were associated with AV access placement and dialysis initiation. A greater number of nephrology visits were associated with AV access creation but not dialysis initiation. Hospitalizations and hospitalizations with an episode of acute kidney injury (AKI) were strongly associated with dialysis initiation (odds ratio (OR) 13.0 (95% confidence interval (CI) 2.3 to 73.3, p-value = 0.004)) and OR 6.6 (95% CI 1.9 to 22.8, p-value = 0.003)).

CONCLUSIONS: More frequent nephrology clinic visits for patients with a recent hospitalization may improve rates of placement of an AV access. A hospitalization with AKI is strongly associated with the need for dialysis initiation. Nephrologists may not be referring the correct patients to get an AV access surgery.

Reference:
Nephrology. 18(1), p.28.
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