Abstract:

Background: Although arteriovenous fistula (AVF) is the preferred vascular access for hemodialysis (HD), the association between vascular access types and quality of life is not well-known. We investigated the relationships between HD vascular access types and all-cause mortality, health-related quality of life (HRQOL) and the degree of depression in a large prospective cohort.

Methods: A total of 1461 patients who newly initiated HD were included. The initial vascular access types were classified into AVF, arteriovenous graft (AVG), and central venous catheter (CVC). The primary outcomes were all-cause mortality and HRQOL and depression. The secondary outcome was all-cause hospitalization. Kidney Disease Quality of Life Short Form 36 (KDQOL-36) and Beck’s depression inventory (BDI) scores were measured to assess HRQOL and depression.

Results: Among 1461 patients, we identified 314 patients who started HD via AVF, 76 via AVG, and 1071 via CVC. In the survival analysis, patients with AVF showed significantly better survival compared with patients with other accesses (p < .001). The AVF and AVG group had higher KDQOL-36 score and lower BDI score than CVC group at 3 months and 12 months after the initiation of HD. The frequency of hospitalization was higher in patients with AVG compared to those with AVF (AVF 0.7 vs. AVG 1.1 times per year) (p = .024).

Conclusions: The patients with AVF had better survival rate and low hospitalization rate, and the patients with AVF or AVG showed both higher HRQOL and lower depression scores than those with CVC.

Reference:


Full Text