



“We reviewed our experience with arteriovenous access surgery in all hemodialysis patients aged 80 years and older to determine if this approach is justified in terms of patency and life expectancy.” Olsha et al (2014).

Reference:

Olsha, O., Hijazi, J., Goldin, I. and Shemesh, D. (2014) Vascular access in hemodialysis patients older than 80 years. Journal of Vascular Surgery. August 6th. .

Vascular access in hemodialysis patients older than 80 years [@ivteam](http://ctt.ec/P7bLp+)
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Abstract:

OBJECTIVE: There is a worldwide surge in numbers of elderly people requiring hemodialysis accompanying the prevailing increase in longevity. There is a trend for central venous catheters to be preferentially placed in elderly patients, whereas others recommend routine use of grafts for surgical access. In our center, age has not been a consideration in deciding to construct arteriovenous access for hemodialysis. We reviewed our experience with arteriovenous access surgery in all hemodialysis patients aged 80 years and older to determine if this approach is justified in terms of patency and life expectancy.

METHODS: A retrospective study was made of all patients aged 80 years and older who had surgery from January 2005 to December 2009 at our national vascular access referral center. All patients had preoperative mapping and had fistula construction if the vein size was at least 3 mm. Otherwise they had brachiobasilic or brachioaxillary grafts. All patients had routine access surveillance by Doppler ultrasound (duplex) and physical examination at regular intervals, and interventions were carried out according to the findings. Type of access, success rate, maturation, primary and secondary patency, and patient survival in the age group older than 80 years were noted.

RESULTS: During the study period, 134 patients had 146 new accesses. There were 128 autogenous accesses (30 forearm, 91 upper arm, and seven transposed basilic veins) and 18 prosthetic accesses. Overall primary patency was 39%, 33%, and 23% at 12, 24, and 36 months. Secondary patency was 92%, 83%, and 77% at 12, 24, and 36 months. There was no significant difference in patency between the different types of accesses and between diabetic and nondiabetic patients. Eleven upper arm and four forearm fistulas had delayed maturation or nonmaturation. The relative risk for delayed maturation or nonmaturation of forearm fistulas (13.3%) compared with brachial-cephalic fistula (12.1%) was 1.1030 (95% confidence interval, 0.3973-3.204; $P = .8571$). Median patient survival was 38 months, with 49 dying during follow-up.

CONCLUSIONS: Contrary to recent recommendations favoring grafts for hemodialysis in patients older than 80 years, most elderly patients in this study were found to have vasculature that was suitable for autogenous access construction, with patency rates similar to those of their younger counterparts when adequate preoperative planning and postoperative maintenance were carried out. Age alone should not disqualify patients older than 80 years from access surgery for hemodialysis, nor should age disqualify these patients from the Fistula First Initiative.

Other intravenous and vascular access resources that may be of interest (External links - IVTEAM has no responsibility for content).

Guide for intravenous chemotherapy and associated vascular access devices from Macmillan. CancerUK IV chemotherapy information.

