Dear Sir,

Demographic changes in the developed countries are modifying their age profile. The world population projections for the year 2025 estimate that 25% of the population will be older than 65 years [1]. Dialysis patients over 65 are correspondingly increasing. Data from the United States Renal Data System showed that 43.5% of patients starting dialysis in the United States in 1990 was older than 65 years, and 16.3% older than 75. Projections for the year 2000 estimate the proportion of older patients starting dialysis to be 60% [2].

Other registries confirm this tendency [3, 4]. Patients starting dialysis at over 65 years of age were 38% of the total in 1992 in the EDTA Registry. In our center, the proportion has risen from 23% in 1987 to 37% in 1993. This general increase in acceptance of older patients into renal replacement programs has mainly been due to the inclusion of patients with diabetes mellitus and vascular diseases. Consequently, vascular morbidity has increased dramatically. Permanent vascular access may be difficult to maintain in these patients, especially if blood flow rates over 300 ml/min are required for high-efficiency hemodialysis.

The election of vascular access type and site of construction depends on several factors (table 1). The need for immediate dialysis and early planning ability are major determinants of the final choice [5]: in the geographical area covered by our center, as many as 16% of patients starting hemodialysis in 1993 required an acute, temporary access [6]. The criteria about which access should be preferred in this population are not clear. There is general agreement in the election of endogenous fistulae as ‘first-choice’ vascular access because of easier construction, less-expensive cost, lower incidence of complications and preservation of vascular beds for future access. However, different emerging literature seems to argue against such a concept. Sommer et al. [7] and Windus [8] present data of 94 and 83% of prosthetic bridges as the ‘first choice’ access in their older patients. The high rate of primary fail-

Table 1. Determinants of vascular access election in patients over 65

Immediate need of dialysis
Expected survival of the graft
Expected survival of the patient
Vascular anatomy
Patient preferences
Experience of the surgical team
ure, insufficient blood flow and final conversion to a prosthetic access are the main arguments used against endogenous fistulae as the first-choice access in the elderly.
We present our experience with 125 patients starting hemodialysis when over 65 years of age in our Center from 1987 to 1994.
Of the 125 patients (74 males, 51 females), 5 were transferred from CAPD. Thirteen patients (10%) were older than 75 years. Primary renal disease incidence is presented in table 2.
Endogenous fistulae could be performed in 93 patients (74.5%), the rest requiring a vascular prosthesis (32 patients, 25.5%). By the time dialysis was started, 3 endogenous fistulae could not be used because of matura-
Table 2. Primary renal disease of patients starting hemodialysis over 65 years (% values)

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cation failure, and prosthetic access had to be constructed. After 3 months of treatment, all the 90 endogenous fistulae and 35 prostheses were functioning normally (fig. 1). No deaths were recorded during this early period.
Graft fistulae were performed in 37.0% of the women and 17.5% of the men (p < 0.05).
Diabetic patients required prosthetic grafts more often than nondiabetics (47.0% in diabetics vs. 21.5% in nondiabetics, p < 0.05).
In our opinion, endogenous fistula as maintenance vascular access is technically feasible in most patients over 65 years, and should always be considered as the first angioaccess choice, mainly if planned in advance, as some time is required for full maturation. However, women and diabetic patients should be evaluated very carefully to reduce the incidence of autologous access failure.
125
100
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25
P.T.F.E. ACCESS
STRAIGHT FOREARM: 6
LOOP FOREARM: 11
UPPER ARM: 15
ENDOGENOUS ACCESS
ANTECUBITAL FISTULA: 8
RADIOCEPHALIC FISTULA: 85
Fig. 1. Angioaccess in patients over 65 years of age starting hemodialysis in our center from 1987 to 1994.

EARLY CONSTRUCTION
FIRST DIALYSIS
THREE MONTHS TREATMENT

References


Hemodialysis Angioaccess in Older Patients
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