LETTERS TO THE EDITOR

Regarding "Creating functional autogenous vascular access in older patients"

We read with great interest the article written by Jennings et al¹ on outcomes of autogenous vascular access in older patients, which was published in March 2011. We do not fully agree, however, with the conclusion that "there is no difference in functional access outcomes for older patients and that arteriovenous fistulae (AVF) patency rates are not statistically different in the elderly and non-elderly populations."

The authors are mixing-up distal and proximal AVF, even though there are significant differences in patency rates between those two access configurations. By following their conclusion, the reader may have the erroneous impression that the creation of a distal AVF at the wrist is the ideal first-choice access for all categories of elderly patients with end-stage renal disease (ESRD). According to our previous meta-analysis, however, elderly patients have an increased risk of distal radial-cephalic fistula failure and significant benefit from the creation of proximal autologous AVF.²

Updating the meta-analysis results by adding three more recent relative articles, after similar search strategy from August 2006 to now,³⁻⁵ we came to the same conclusion, that distal wrist AVF have an increased risk of failure in 12 months in elderly patients compared with nonelderly ESRD patients (Fig). One of the explanatory factors of these findings may be the very accurate observation by Jennings et al in the "Discussion" of their article, which we fully agree with, that, "the skin and soft tissue in older patients is more substantial in the upper arm while the cephalic vein being a little deeper gives more soft tissue to tolerate repeated cannulation."

We believe that these updated meta-analysis results should be considered when planning a vascular access in incident elderly patients, avoiding distal AVF when the anatomic structures, including the vasculature as well as the quality of the soft tissue, are below a certain acceptable level.

The conservation of distal access sites in elderly ESRD patients is of minimal importance due to their limited life expectancy, as was also confirmed by Jennings et al,¹ who reported a survival rate of

12-months failure rate

52% at 24 months. In our view, the use of proximal AVF, or even synthetic grafts as primary access, should be more liberal in the elderly, and especially in those aged >70 years.

Miltos K. Lazarides, MD, EBSQyasc George S. Georgiadis, MD George A. Antoniou, MD Dimitrios A. Mikroulis, MD

Department of Vascular Surgery Democritus University Alexandroupolis, Greece

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Reply

We reviewed the comments by Lazarides et al regarding our article concerning dialysis access in older patients.¹ Their earlier meta-analysis³ of this topic was an important reference in our paper, and we appreciated the updated table accompanying their

Study or sub-category	elderly n/N	non-elderly n/N	OR (fixed) 95% Cl	OR (fixed) 95% Cl	Year
Prishl	12/16	62/107		2.18 [0.66, 7.19]	1996
Woods	66/164	28/91		1.52 [0.88, 2.61]	1997
Grapsa	4/48	6/101		1.44 [0.39, 5.36]	1998
Brunori	22/116	8/56	_	1.40 [0.58, 3.39]	2000
Wolowzcyk	26/74	43/134	_	1.15 [0.63, 2.09]	2000
Burt	5/27	8/26		0.51 [0.14, 1.84]	2001
Johnson	17/39	12/56		2.83 [1.15, 6.96]	2002
Kawecka	20/51	136/409	_	1.30 [0.71, 2.36]	2006
Lok	25/92	23/139	_	1.88 [0.99, 3.57]	2006
Weale	107/200	87/161	_ _	0.98 [0.65, 1.48]	2008
Richardson	7/12	12/38		→ 3.03 [0.80, 11.54]	2009
Swindlehurst	26/69	7/22		1.30 [0.47, 3.60]	2010
Total (95% CI)	908	1340	•	1.35 [1.10, 1.65]	
Test for heterogeneity: Chi Test for overall effect: Z = 2	² = 10.68, df = 11 (P = 0.47), l 2.83 (P = 0.005)	¹² = 0%			
			0.1 0.2 0.5 1 2 5	10	
			Favours elderly Favours non-elder	erly	

Fig. Forest plot shows a comparison of the odds ratios (*OR*) and 95% confidence intervals (95% *CI*) of the 12-month failure rate of distal arteriovenous fistulas in elderly and nonelderly patients with end-stage renal disease. Statistical analysis was performed using the available free RevMan 4.2 software (The Cochrane Collaboration, 2003).

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