

VASCULAR ACCESS IN ADULT HEMODIALYSIS PATIENTS IN GREECE: CONCLUSIONS THROUGH A CROSS-SECTIONAL ANALYSIS

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Background and aim

Vascular access (VA) continues to be the "Achilles heel" in haemodialysis (HD) and despite the improvements in dialysis technology, VA complications are a major cause of morbidity and mortality in haemodialysis patients. The aim of this study was to assess the type of VA used [native arteriovenous fistula (AVF), arteriovenous graft (AVG) and central venous catheter (CVC)] in Greek adult HD patients at the initiation and during the course of HD as well as to recognize factors that are associated with the use of each type of VA.

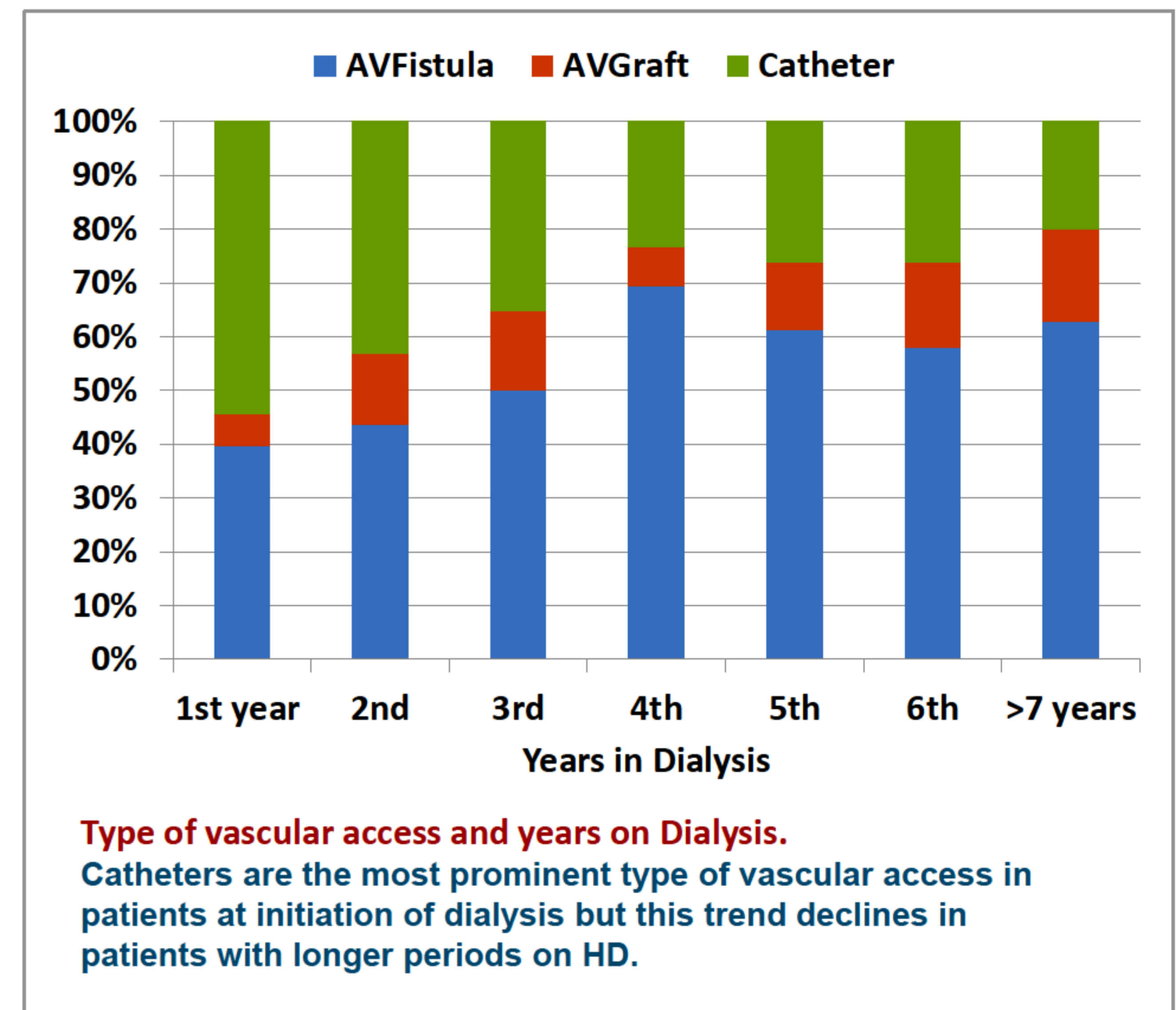
Methods

In this cross-sectional analysis, we used a prefix questionnaire which was sent to dialysis units (public hospitals and private sector) covering the geographical area of mainland Greece and the islands. Sampling size was estimated to 15% of the Greek dialysis population. Apart from type of VA and demographic patient characteristics, dialysis duration and concurrent comorbidities such as diabetes, heart failure, coronary arterial disease and obesity were also examined. Data were analyzed using the χ^2 , student's t and ANOVA tests.

Results

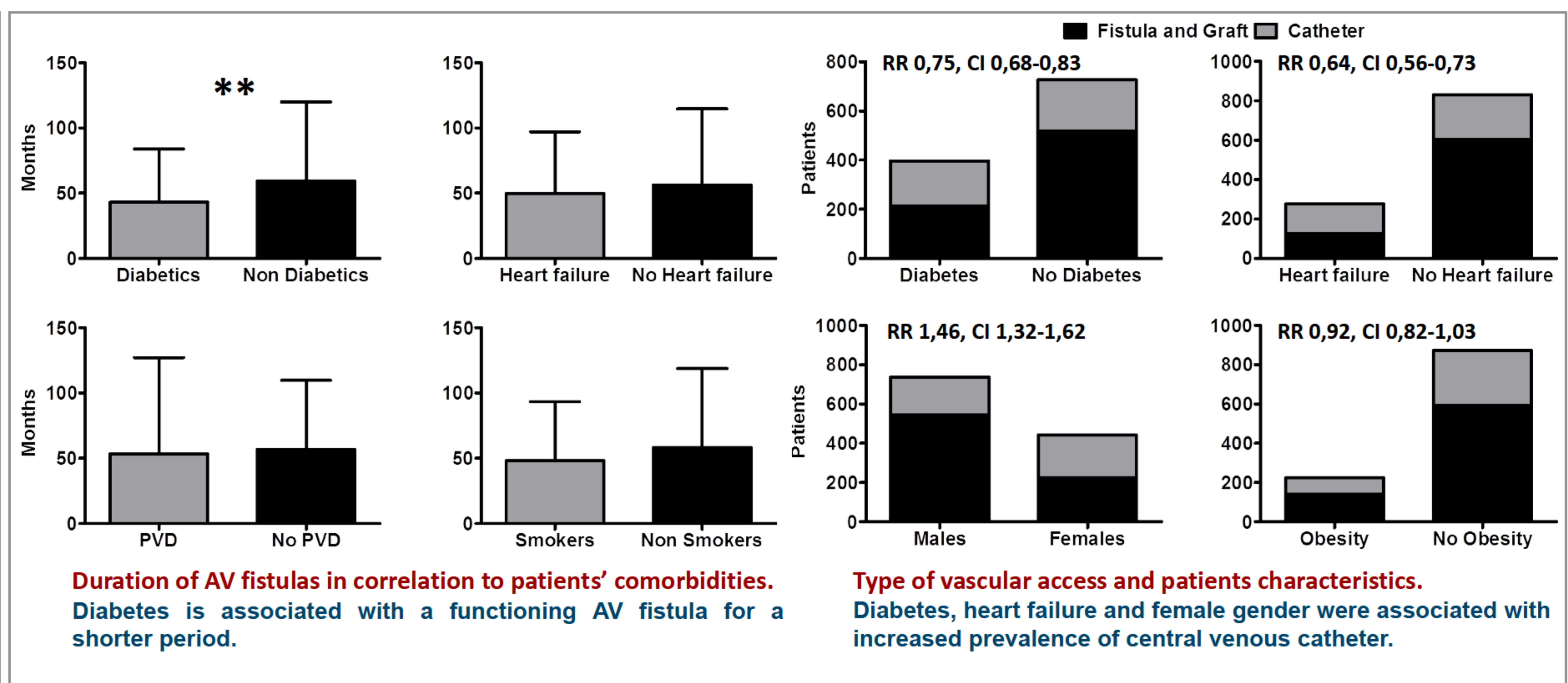
Patients included		Type of access		
N=1251		Initiation of HD	Current access	
Mean age (years \pm SD)	66,9 \pm 14,9	Jugular vein catheter	447 (36,5%)	300 (24,6%)
Gender (M/F)	762 / 449	Subclavian catheter	178 (14,5%)	86 (7,1%)
Mean HD duration (months)	54,2	Femoral vein catheter	102 (8,3%)	35 (2,9%)
Primary renal diseases		AV Fistula	367 (29,9%)	548 (53,3%)
Diabetic nephropathy	282 (22,7%)	AV Graft	42 (3,4%)	148 (12,1%)
Glomerulonephritis	192 (15,5%)	Catheter and AV Fistula	69 (5,6%)	-
Hypertension	118 (9,5%)	Catheter and AV Graft	20 (1,6%)	-
Polycystic kidney disease	103 (8,2%)			
Cardiorenal syndrome	20 (1,6%)			
Other/Unknown	526 (42%)			

Patients characteristics and causes of ESRD.



Comorbidities	N
Hypertension	918 (73,4%)
Diabetes	409 (32,7%)
Ischemic heart disease	363 (29%)
Smoking	285 (22,8%)
Heart failure	281 (22,5%)
Obesity	225 (18%)
Peripheral vascular disease	223 (17,8%)

List of comorbidities



Conclusions

- ✓ Central venous catheter is the most common type of VA at initiation of HD in Greece.
- ✓ After one year on HD the AV fistula is the most common type of VA.
- ✓ AV fistula is more common in male than in female patients.
- ✓ Diabetes and heart failure are predisposing factors for maintaining a catheter access.



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