

ULNAR-BASILIC ARTERIOVENOUS FISTULA (UBAVF) AT WRIST FOR HAEMODIALYSIS: REVIEW OF LITERATURE AND A SINGLE CENTER EXPERIENCE

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INTRODUCTION

Ulnar-basilic direct arteriovenous fistula (UBF) is a vascular access (VA) option for haemodialysis (HD), first reported in 1967. Its use is rare, as the few reports published suggest, as well as its exclusion from the KDOQI and EBPG guidelines. We report our single center experience and reviewed the literature.

PATIENTS and METHODS

We retrospectively analyzed prospectively collected data from our single vascular access centre from 2007 to 2012. Patient demographic and comorbidity factors are listed in table 1, whereas in table 2 are data about functional status, previous and actual VA.

All patients, after preoperative ultrasound (CDU) evaluation, were treated by end-to-side arteriovenous anastomosis at the wrist. Preventive haemostasis and operative microscope were routinely used. CDU and clinical follow-up was carried out at 1/3/6/12 months, unless any complication occurred before. Functional patency was defined as an angioaccess successfully used for haemodialysis delivery. Early failure was defined as thrombosis or patent but unfunctional VA 1 month after creation. Patency rate were analysed by Kaplan-Meier method.

Patients (n)	15
Male	10 (66%)
Age (mean ± DS)	63 ± 13
Hypertension	15 (100%)
Diabetes	5 (33%)
Obesity (BMI > 30)	3 (20%)
Peripheral vascular disease	10 (66%)

Table 1: Demographic and comorbidity factors (BMI: body mass index)

CKD haemodialysis	11 (73%)
- Primary CVC	3 (20%)
- CVC after AVF thrombosis	3 (20%)
- Dysfunctional AVF	5 (33%)
CKD conservative treatment	4 (27%)

Table 2: Functional status, previous and actual VA (CKD: chronic kidney disease; CVC: central vein catheter)

RESULTS

Immediate (24h) patency was obtained in 100% of patients. Early failure rate was 20% at 1 month. Primary and secondary 1 year patency, by an intention to treat basis, were 30% and 53% respectively (3 pts died before the 3th month). Any ischemic complication were observed, nor high-output heart failure. From the analysis of the indexed publication available, primary and secondary patency rate at 1 year varies from 42% to 78% and 44% to 78,3% respectively. A significant heterogeneity of studies, methodological accuracy, and reported follow up were observed.

CONCLUSION

UBAVF can be evaluated as a distal native AVF, when the RCAVF is impossible, before planning a proximal AVF or a graft.

