

# Early Outcomes of Basilic Vein Transposition (BVT) at a Tertiary Vascular Unit

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## INTRODUCTION

Haemodialysis as renal replacement therapy requires constant reliable vascular access<sup>1</sup>

- Upper limb Autologous AV fistula preferred access choice<sup>1</sup> IF possible
- Poor native cephalic vein - IVDU, Elderly
- Prolonged illness (venepuncture, cannulation)
- Previous surgery (failed access)
- Ideal route of access without suitable cephalic vein is contentious.

This study reflects our experience with BVT done between Jan 2017 to Dec 2018

## AIMS AND OBJECTIVES

Assess patency of BVT at 12 months

- **Primary:** Time of access placement until any intervention designed to maintain or re-establish patency<sup>1</sup>
- **Secondary:** Time of access placement until access abandonment, including intervening interventions<sup>1</sup>

## MATERIAL & METHODS

### Study Design:

- Single centre
- Retrospective
- Case series

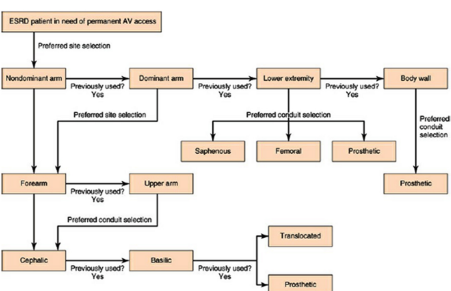
### Patients assessed in dedicated vascular access clinic:

- History and physical examination
- Venous duplex
- Duplex (upper limb tourniquet)
- Cephalic vein non usable if
  - Sclerotic / occlusion
  - Diameter <2mm

- Basilic vein Suitable for BVT if diameter >3mm

- Follow up: Clinical, Ultrasonography

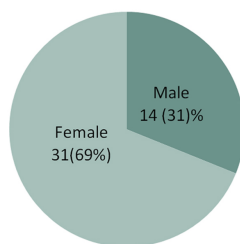
### Access Algorithm



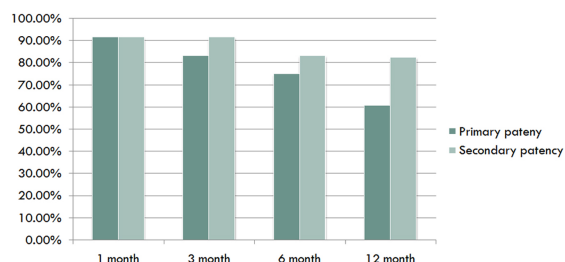
## RESULTS

- N- 45. Primary success rate was 91.1% (41patients)
- 10 patients; fistulogram and angioplasty within 1 year
- 4 patients; further interventional procedure

### Gender Distribution



### Patency Rates



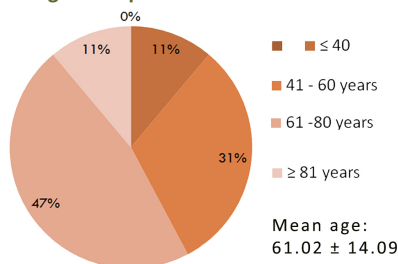
### Comorbidities

COMORBIDITIES	N=45
DM	14 (31.1%)
HTN	38 (84.4%)
IHD	5 (11.1%)
CVA	6 (13.3%)
Smoker	3 (6.66%)
PVD	12 (26.6%)
Dyslipidaemia	9 (20%)

### Medications

ANTIPLATELET		ANTICOAGULATION		STATIN
Aspirin	Clopidogrel	Warfarin	NOAC	
11	11	2	0	18
24.4%	24.4%	4.4%		40%
48.9%				

### AgeGroup



### Follow up

- 45 • Intention to treat
- 42 • 3 patient died before 1 year of follow up
- 40 • 2 patients died after 1 year of follow up. • All fistulas were working at time of death. • Mortality unrelated to surgical causes.

## DISCUSSION:

Secondary interventions needed: 0.3 procedures required / year / patient

Literature: average 2.6 procedures required / year / patient<sup>2</sup>

### References:

1. Sidawy AN et al. The society for vascular surgery: Clinical practice guidelines for the surgical placement and maintenance of arteriovenous haemodialysis access. J Vasc Surg 2008; 48:2S-25
2. Miller GA et al JVASC Access 2009

## CONCLUSION

### BVT

- Excellent early success rate
- Wound infection / neuralgia not uncommon
- Good primary and secondary patency at 1 year
- Re-intervention common ? surveillance

**Durable access option in "difficult access patients" without cephalic options**