Ulnar-Basilic Fistula

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Disclosure

Speaker name: Julien Al Shakarchi

I have the following potential conflicts of interest to report:

☐ Consulting
☐ Employment in industry
☐ Shareholder in a healthcare company
☐ Owner of a healthcare company
☐ Other(s)
☒ I do not have any potential conflict of interest
Birmingham
Vascular Access

• The fistula first initiative has promoted AVFs as the vascular access of choice as AVFs have better long-term patency than AVG.
• International guidelines recommend that the most distal AVF possible should be created in the first place.
Vascular Access

• Key to success in vascular access is personalised care:
  – Distal AVF is not always best option
  – AVG can be more useful than AVF
  – CVC is not always worst option
Ulnar-basilic AVF: Introduction

- Although some authors have advocated the creation of UB fistula, it has not gained popularity and remains a rarely performed AVF.
- UB AVFs are not mentioned in any of the international guidelines.
Anatomy

Recurrent radial artery
Biceps tendon
Brachioradialis muscle
Lateral antebrachial cutaneous nerve
Radial styloid
Superficial palmer artery

Bicipital aponeurosis
Median nerve
Flexor carpi radialis muscle
Flexor carpi ulnaris muscle
Flexor digitorum superficialis muscle
Ulnar-basilic AVF: Technique

• Local/Regional Anaesthesia

• Longitudinal incision between vein and artery

• Basilic vein dissection

• Ulnar artery dissection (Flexor carpi ulnaris might be in the way and might require partial resection)

• End to side anastamosis with microscopic technique
Ulnar-basilic AVF: Review of literature

• Searches of Pubmed, Medline, Embase and the Cochrane Library were performed

• The primary outcomes for this review were primary and secondary patency rates at 12 months

Number of abstracts identified in search strategy: 153

Articles excluded:
- Wrong topic 137

Number of full text articles assessed for inclusion in the study: 16

Articles excluded:
- Wrong topic 6
- Wrong study type 2

Final number of included studies in the review: 8
# Ulnar-basilic AVF: Review of literature

<table>
<thead>
<tr>
<th>Reference</th>
<th>Number of patients</th>
<th>Number of procedures</th>
<th>Mean Age</th>
<th>Diabetes n (%)</th>
<th>Male n (%)</th>
<th>1 year Primary patency rate (%)</th>
<th>1 year Secondary patency rate (%)</th>
<th>AVAIS (%)</th>
<th>Infection (%)</th>
<th>Follow up (Months)</th>
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Ulnar-basilic AVF: Review of literature

- Few papers with low number of patients
- 1 year primary patency: 53%
- 1 year secondary patency: 72 %
- Low rate of AV access ischaemic steal (AVAIS): 0.4%
- Maturation time is more than 8 weeks
Ulnar-basilic AVF: Conclusion

- Patency rates of UB AVF are slightly worse than RC AVF
- Long term outcomes are not reported in the literature but likely to be good once mature
- Surgical challenges include small vessels and learning curve
- Nursing challenges include difficulty in cannulation
When should we consider the UB AVF?

- Second choice forearm AVF if RC not possible
- Younger patients
- Adequate size vessels
Thank you