CONTROVERSES ET ACTUALITÉS EN CHIRURGIE VASCULAIRE
CONTROVERSIES & UPDATES IN VASCULAR SURGERY
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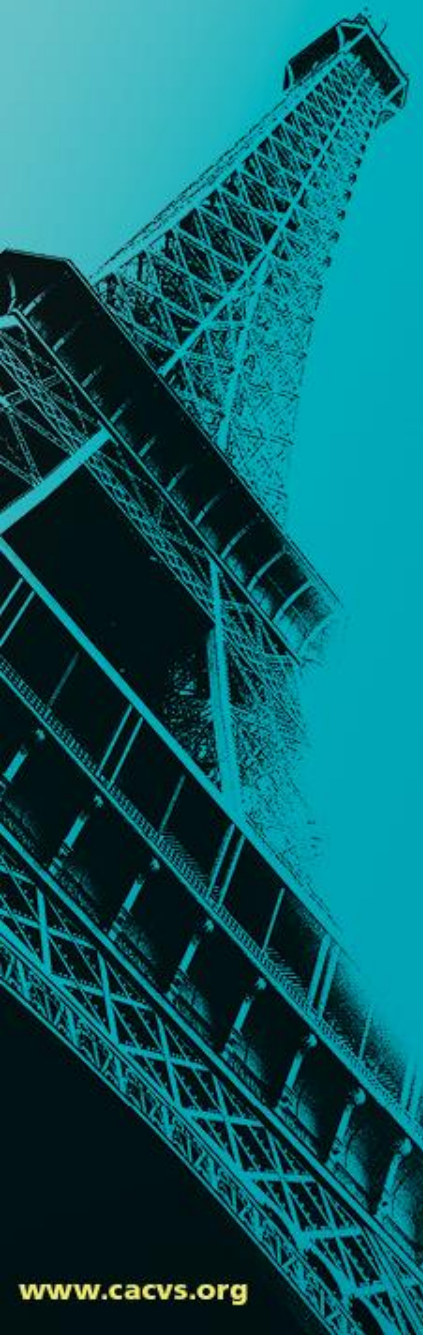

Ulnar-Basilic Fistula

Julien AL SHAKARCHI
Nicholas INSTON

www.cacvs.org

Disclosure

Speaker name: Julien Al Shakarchi

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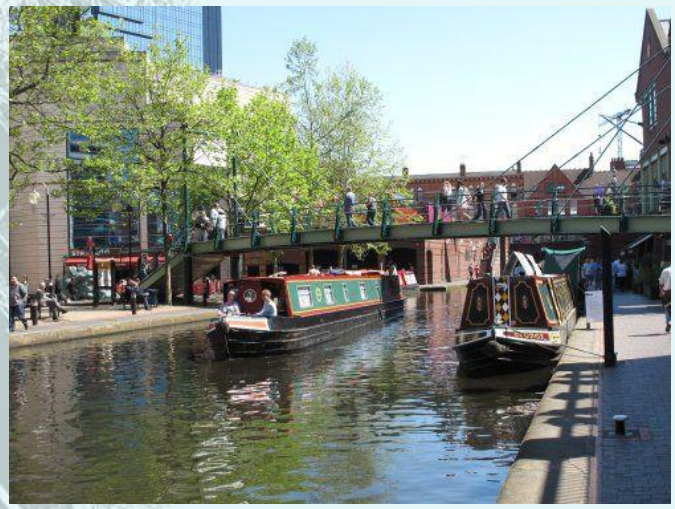
- ☐ I have the following potential conflicts of interest to report:
- ☐ Consulting
- ☐ Employment in industry
- ☐ Shareholder in a healthcare company
- ☐ Owner of a healthcare company
- ☐ Other(s)
- ☒ **I do not have any potential conflict of interest**

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.

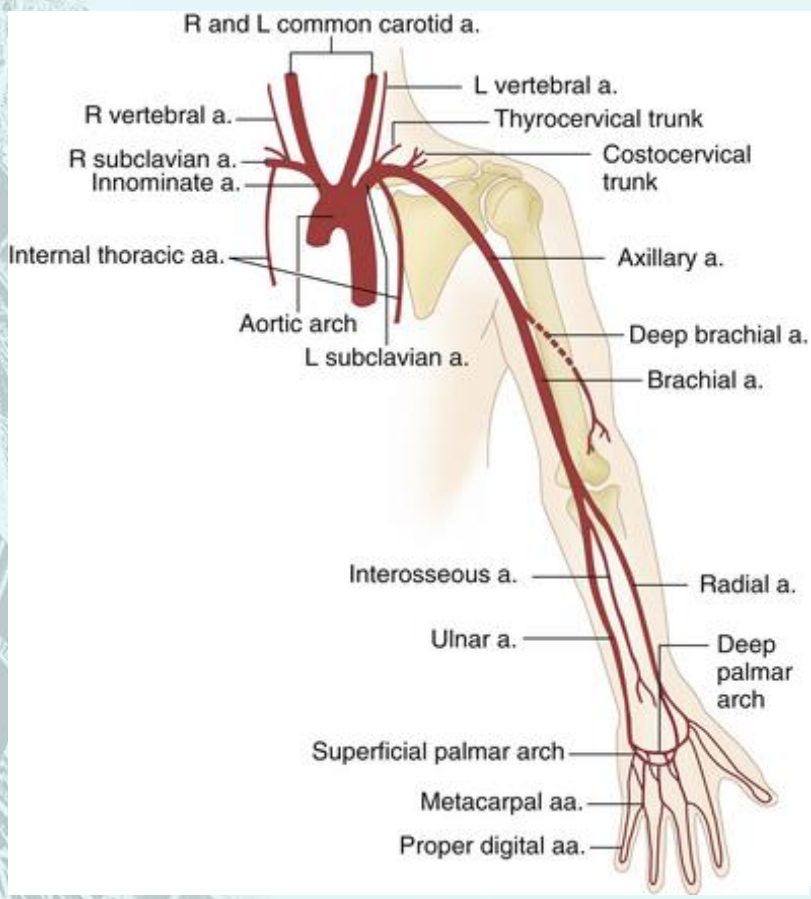
Vascular Access

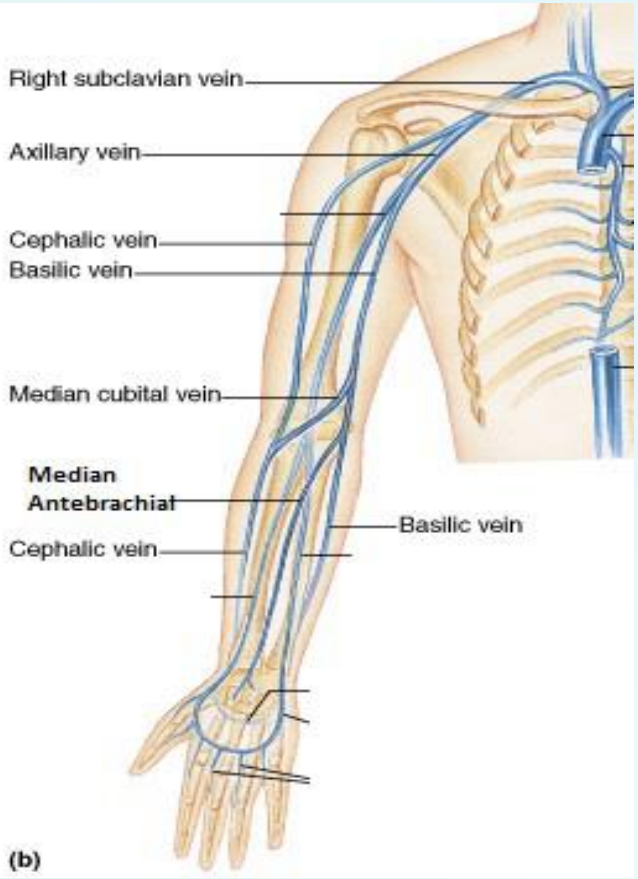
- Key to success in vascular access is personalised care:
  - Distal AVF is not always best option
  - AVG can be more useful than AVF
  - CVC is not always worst option

Ulnar-basilic AVF: Introduction

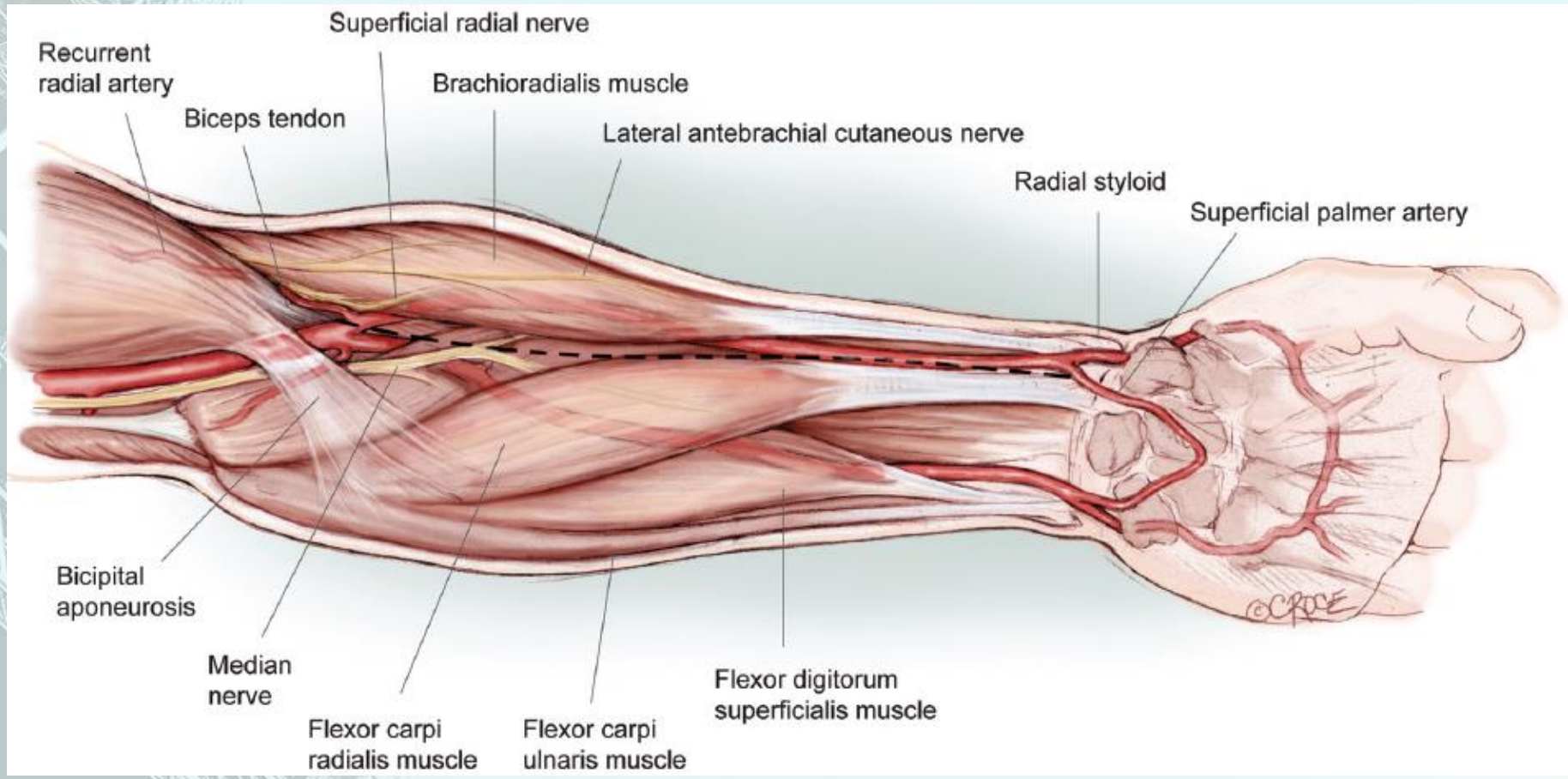
- Although some authors have advocated the creation of UB fistula, it has not gained popularity and remains a rarely performed AVF.
- UB AVFs are not mentioned in any of the international guidelines.

Anatomy


R and L common carotid a.
L vertebral a.
R vertebral a.
Thyrocervical trunk
R subclavian a.
Innominate a.
Costocervical trunk
Internal thoracic aa.
Axillary a.
Aortic arch
Deep brachial a.
L subclavian a.
Brachial a.
Interosseous a.
Radial a.
Ulnar a.
Deep palmar arch
Superficial palmar arch
Metacarpal aa.
Proper digital aa.


Right subclavian vein
Axillary vein
Cephalic vein
Basilic vein
Median cubital vein
Median Antebrachial
Basilic vein
Cephalic vein
(b)

Anatomy


Superficial radial nerve
Recurrent radial artery
Brachioradialis muscle
Biceps tendon
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

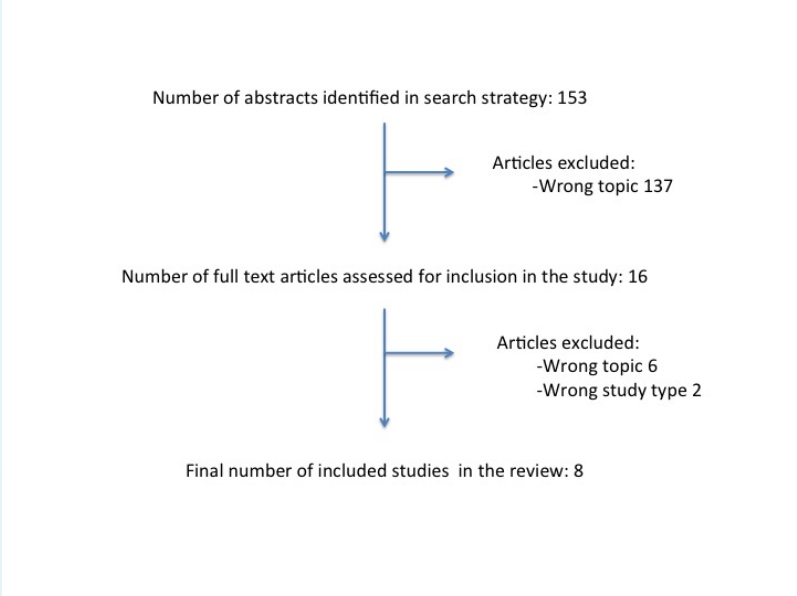
Ulnar-basilic AVF: Technique

- 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



Ulnar-basilic AVF: Review of literature

Reference	Number of patients	Number of procedures	Mean Age	Diabetes n (%)	Male n (%)	1 year Primary patency rate (%)	1 year Secondary patency rate (%)	AVAIS (%)	Infection (%)	Follow up (Months)
Kinnaert	29	29	na	na	14 (48)	60.9	na	na	na	na
Cetto	18	18	na	na	na	47	na	na	na	na
Salgado	60	61	48.9	12 (20)	24 (40)	70.9	78.3	0	0	na
Weyde	13	13	na	na	13 (48)	70.4	81.5	0	0	na
Cavatorta	9	9	na	na	4 (44)	78	na	na	na	na
Bourquelot	63	63	54	8 (12.7)	36 (57)	42	60	0	na	20
Liu	48	52	69.5	10 (20.8)	37 (77)	43	54	1.9	3.8	41
Shintaku	29	29	72.9	16 (55.2)	18 (63)	25	85.5	0	na	na
Pooled rate % (95% CI)						53.0 (40.1-65.8)	72.0 (59.2-83.3)			

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 vessells 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 vessells

Thank you