

# CASE PRESENTATION

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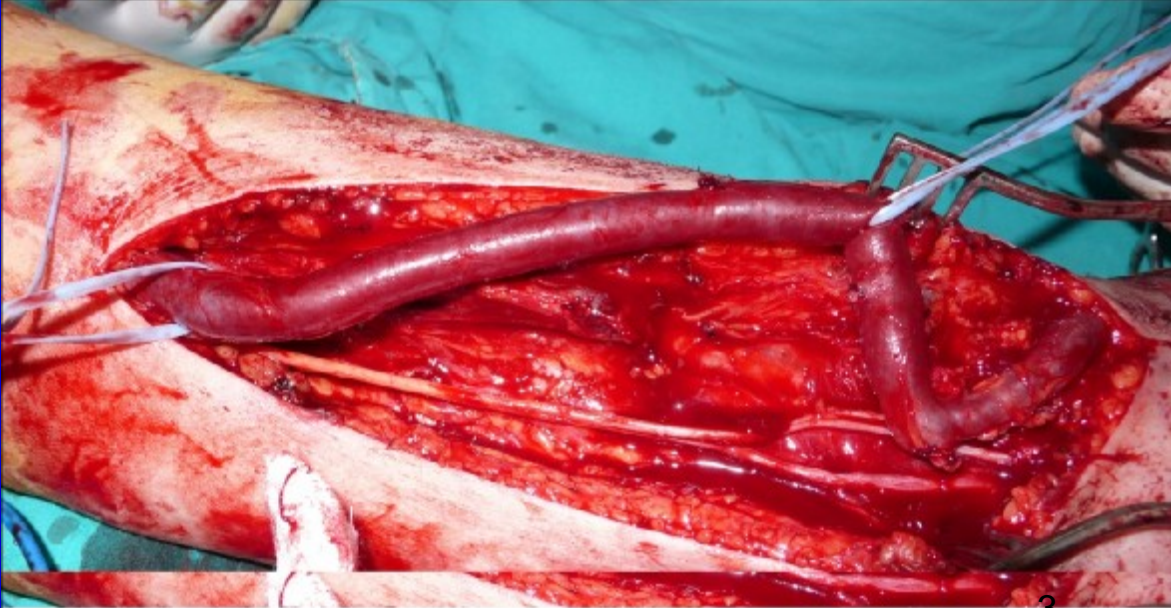
# CASE 1

- 45 years old male patient
- He is being dialysed since 6 months from right jugular catheter.
- 2 AVF attempts in left forearm were unsuccessful.
- 2 months ago an AVF was done in the antecubital fossa in another center.
- On physical examination there is a strong thrill in the medial aspect of the upper arm, but no visible vessel is present.
- His nephrologist sent him to our center for evaluation.





Basilic Vein Transposition



# CASE 2

- 76 years old diabetic male
- Right jugular catheter of 3 weeks duration
- Sent by his nephrologist to have an avf
- Left radial artery was weakly palpable
- Cephalic vein was barely palpable and seen
- No other diagnostic tool was used

- A left radial cephalic (Cimino) avf was planned.
- The patient was informed that if the vessels be found unsatisfactory for construction of an avf, or if it is decided unsatisfactory after the construction of the anastomosis, a new incision and a new fistula would be done in the elbow region during the same operation.

- An incision was done about 4 cm above the left wrist
- Radial artery was about 2 mm and calcific
- Cephalic vein was about 1.5 mm
- Venotomy was done and 1% heparinised NaCl solution was injected by an 18 G cannula proximally and distally after compressing the vein 3-4 cm above and below the venotomy. Dilation of the vein segments could easily be seen during the injection under slight pressure.

- During the arteriotomy, both the proximal and distal portions of the artery was pulsatile and the blood was ejecting.



- An 8 mm side-to-side radial-cephalic anastomosis was done using 7-0 prolene.

- Immediately post-operative and the next day there was a slight thrill on the fistula.
- 4 weeks after the operation distal portion of the fistula was well functioning and could easily be seen, but proximal part could not be seen, barely palpable and the thrill could not easily be felt.



- An angiography was done using distal part of the fistula as an entry site, and 1 cm stenosis of about 80% was detected.



- An angioplasty was done using the same entry site without giving any harm to the artery or proximal portion of the fistula's out-flow tract.



- After the procedure the fistula was functioning well and ready for use.
- 2 weeks later a dialysis was done using the proximal portion of the fistula.

# CONCLUSION

- It may be possible to make more radial-cephalic (Cimino) a-v fistulas by using simple physical examination, intraoperative dilation test either by 3F Fogarty balloon catheter or an injection cannula and making a side-to-side anastomosis to increase the rate of functioning (patent) fistula's and possible future entry site for radiological intervention.