

Endovascular Management for Salvage of Failing Arteriovenous Fistula

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Subjects and Method

This is a prospective cohort study. 40 patients on regular hemodialysis with natural AVF (brachio-cephalic / brachio-basilic and radio-cephalic) presented with difficulty of cannulation and pump suction with increase pressure on pump more than 300 ml/sec after regular usage and cannulation of the access . Investigation: Duplex U/S shows stenotic lesion in the vein at site of puncture or proximal to anastomosis.operative details:balloon angioplasty of lesion by 4, 5 and 6 mm diameter balloons gradually followed by high pressure balloon (5-6 mm) with No stenting. The access through radial (distal part or even in anatomical snuff box) ,ulnar artery U/s guided using radial sheath

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Result

- 4 patients show immediate recoil and failed dilatation.
- 2 patient complicated with postoperative hematoma
- 1 patient with AVF thrombosis
- Follow up by duplex U/S at 0,3,6,12 months show patency without need for reintervention except in 5 patients needs re-ballooning with larger balloons after 6 months of primary intervention.

Conclusion

- Endovascular management is feasible and has an important role for arteriovenous fistula(for hemodialysis) salvage caused by stenotic or occluded lesions.

