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 6 FR.

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.