Role of Endovascular Management in Treatment of Surgical High Risk Patients with Popliteal Artery Aneurysm

Ali Sabbour, MD, Mohamed Ismail, MD, Ain Shams University, Cairo, Egypt.

Subjects and Method
This is a case report. Smoker male patient 65 years old. He is non diabetic, non-hypertensive. He has ischemic heart disease with EF: 40 %. He presented with Lt big toe cyanosis and short distance claudication for 3 weeks duration. O/E: Pulsatile swelling at Lt popliteal fossa, cyanosis of Lt big toe. Investigation: Ct angiography shows Lt popliteal artery aneurysm at zone 1 with patent distal run off. Operative details: Ipsilateral femoral access. Standard hydrophilic wire 0.035 was used. Exclusion of aneurysm was done by 2 overlying stents graft measuring 9*60 and 9*60. A completion angiogram was performed with and without knee flexion to evaluate runoff, kinks, or occlusions caused by the bending of the knee.

Results
- Improvement of symptoms
- Angiographically successful exclusion of Popliteal artery aneurysm.
- Patent stent in 1 year follow up (by duplex).
- After 14 months the patient developed short distance claudication pain CT angiography showing focal stenosis in distal end of stents

Conclusion
Endovascular approach has low morbidity and high technical success rate in treatment of popliteal artery aneurysm in surgical high risk and with suitable anatomy (popliteal artery zone 1) although the surgical option has long patency and still the golden way of management.