Aneurysmal Changes following Drug Coated Balloon Angioplasty in Femoro-Popliteal Arterial Disease

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Case Presentation

76 year-old man underwent extensive right femoro-popliteal and infra-popliteal arterial intervention for right lower extremity rest pain and non-healing right great toe gangrene with CSI orbital atherectomy, extensive drug-coated balloon angioplasty [Admiral DCB of total 400 mm length] and stenting [Supera in the SFA/Popliteal arteries and drug-eluting stents were placed into the tibioperoneal trunk].

Pre-Intervention

One Month Post-Intervention

Post-Intervention

One and half years Post-Intervention

Post intervention Follow-up

Patient was placed on ASA, Plavix and high dose Statin. Dual Anti-platelet therapy was advised for at least 6 months. His gangrene and rest pain resolved. One month follow-up ultrasound showed a patent femoro-popliteal and infrapopliteal arterial system. However, the SFA and popliteal arteries were aneurysmal [normal sized pre-procedure]. Patient had no symptoms. Leading an active lifestyle.

Follow-up

3-monthly ultrasound were performed. One and half years later he developed symptoms.

Conclusions

This case illustrates the risk of aneurysmal degeneration of the arterial wall in extensive femoro-popliteal arterial intervention with the use of drug coated balloon angioplasty for very long lesions. This warrants further studies to study the effect of long length DCBs on ecstatic arteries.