**INTRALUMINAL VERSUS SUBINTIMAL APPROACH TO CHRONIC TOTAL OCCLUSIONS IN PERIPHERAL ARTERIAL DISEASE**

**S.K. Amruthlal Jain**, T. Larsen, F. Alcocer, M. Zughaib, P. Alexander

Providence Hospital and Medical Center, Southfield, MI, USA

Objective: To determine whether the intraluminal (IL) approach in treating chronic total occlusions (CTO) in peripheral arterial disease (PAD) is advantageous to subintimal (SI) approach in maintaining luminal patency.

Background: There is growing evidence that chronic total occlusions (CTO) in femoropopliteal lesions can be approached percutaneously with a relatively high success rate. There is no data available to compare the IL vs. SI approach.

Methods: A retrospective analysis was performed of patients who underwent peripheral angiographic intervention for CTO femoropopliteal lesions at our center from January 2005 to December 2008. Patient charts and diagnostic reports were reviewed.

Results: A total of 192 patients were included with total number of CTO lesions included being 327. (296 were IL and 31 were SI). There were no major differences between the two groups in baseline characteristics. Among both the groups, the most common lesion was at mid Superficial Femoral Artery and all the lesions were ballooned and all SI approach lesions needed stenting. The mean length of lesion was 10 cm in IL arm and 20 cm in SI arm. There were no differences in complication rates between two groups. The restenosis rates between IL vs. SI were 15.5% vs. 3.0% (p value <0.05) at 2 years follow up. SI had higher procedure abortion rate (20%), but higher reattempt success rate (85%).

Conclusion: Subintimal approach in patients with CTO femoropopliteal lesions appears to have an advantage over Intraluminal approach with improved two year patency rates. Further larger studies are needed to assess the long-term patency/outcomes.