Purpose: Evaluation of the role of endovascular intervention for the treatment of femoro-popliteal TASCII C and D lesions as regard efficacy, patency rates, and limb salvage.

Methods: 69 patients, 26 with severe lifestyle-limiting claudication and 43 with critical lower limb ischemia were included in the study. All of them showed femoro-popliteal TASCII C or D lesions. Acute lower limb ischemia, TASCII A and B lesions were excluded. Crossing the lesion via transluminal approach was tried first and if failed subintimal angioplasty was performed. The recanalised segment then subjected to balloon angioplasty followed by either stenting or drug eluting balloons (DEBs). Patency rates were calculated at regular intervals.

Results: The treated lesions were 39 TASCII C and 30 TASCII D. (10 lesions) were located in the popliteal artery, (46 lesions) were located in the femoral artery and (13 lesions) extended from the femoral into the popliteal artery. Technical success rate was 92.75% (64 interventions). Patients were treated either by PTA+DEB (20 patients) or PTA+S(stent) (23 patients) or SIA(subintimal angioplasty)+S (21 patients).The primary patency rate was 96.87% at 6 months, 81.25% at 12 months. The assisted primary patency rate was 98.43% at 6 months, 85.93% at 12 months. The secondary patency rate was 98.43% at 6 months, 82.81% at 12 months.

Conclusions: Endovascular intervention in femoro-popliteal TASCII C and D lesions is a safe and effective procedure that offers good midterm results as regard technical success, patency and limb salvage rates.