POSTER PRESENTATION

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Crural-to-Crural/ Pedal Bypasses

A reasonable alternative in challenging cases and times

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INTRODUCTION

The efficacy of distal and pedal bypasses originating from femoral and popliteal artery as an inflow has been well documented throughout the literature.

AIM

The aim of this study is to assess using the crural vessels as inflow for crural and pedal bypasses in patients with Critical limb ischemia (CLI).

METHODS

All patients with CLI between 2015 and 2019 undergoing Crural-Crural/Pedal bypasses were included. All grafts were recruited in to graft surveillance program. Threatened grafts were offered salvage angioplasty. The primary end-points were; 30 day mortality, limb salvage and patency rates.

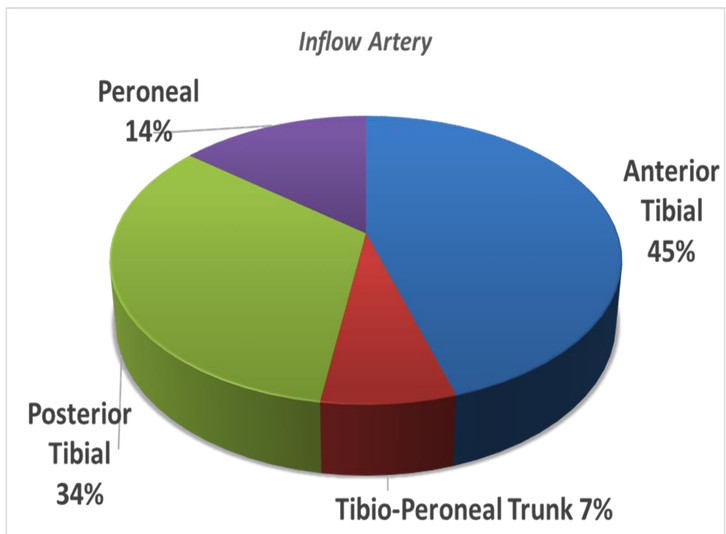
RESULTS

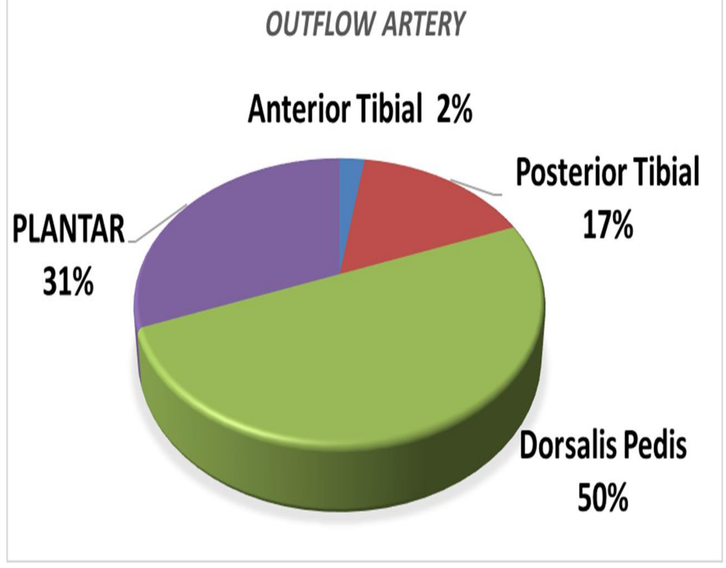
Forty two consecutive patients (Table 1) with CLI underwent 42 Crural-Crural/Pedal bypasses. Autogenous vein was used in all grafts. Inflow Hybrid I angioplasty was required in 15(36%) cases. 14(33%) bypasses were done under local anesthesia. Indication for bypasses were: gangrene in 22(52%), tissue loss in 14(33%), trauma in 2(5%) and acute on chronic leg ischemia in 1(2%) cases. For inflow and outflow arteries see figure (1). 15(36%) threatened grafts were detected on graft surveillance program and had a total of 35 salvage angioplasties. The 30-days mortality rate was 2% (1 patient) this was a poly-trauma patient and died from Multi-organ failure. Overall 1 year mortality rate was 10%(4 patients). 2 patients underwent major amputations. The first, at 2 month following distal embolization post Femoral false aneurysm thrombin injection. The second, at 6 month

Patients' Demographic Data

Patients	n=42
Men	30 (71%)
Median age (range)	65yr (26-87)
Diabetes mellitus	38 (90%)
Chronic renal failure	16 (38%)
IHD	18 (43%)
Hypertension	28 (67%)
Smokers/Ex-smokers	22 (52%)

Inflow and Outflow Arteries





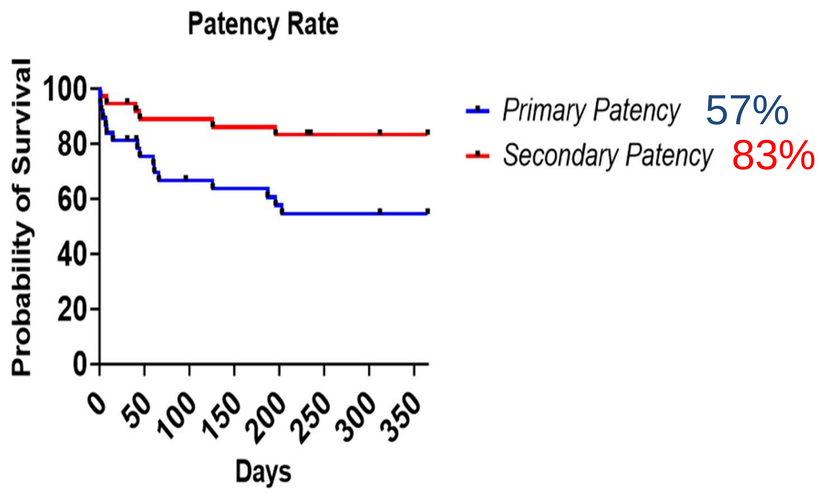
A- Site of Proximal anastomosis
B- Site of distal anastomosis
Blue arrow indicates GSV harvested

PTA-PLANTAR

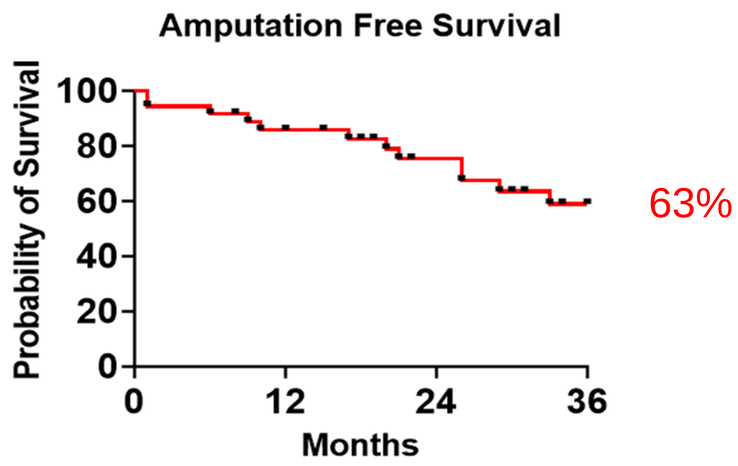
ATA-PTA

ATA-DPA

Kaplan Meier graph for Patency rates at 1 year



Kaplan Meier graph for Amputation free survival rate at 36 months



CONCLUSIONS

Crural-Crural/pedal bypass is a feasible and reliable option in selected patients. Medium term results showed good outcome with good patency and high limb salvage rates. In high risk patients this procedure can be performed under local anaesthetic. Graft surveillance is essential in detecting threatened grafts

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