INTRODUCTION
Successful surgical or endovascular treatment in lower limb critical ischemia have extensively been reported with very good outcomes. However, there is no clear consensus on an optimal modality of revascularisation in patients with critical upper limb ischemia (CULI). The results of endovascular interventions are less promising in long occlusive and very distal lesions. Ies. Surgical bypasses, on the other hand, even though have good patency and durable results in lower limbs, have not been adopted on a wider scale in upper limbs, with very little reports on palmar arch revascularization.

AIM
We present our experience and technique of vein bypass exclusively to palmar arch for the treatment of CULI.

METHODS
Retrospectively analyses of prospectively collected data of all patients with critical upper limb ischemia who underwent palmar arch bypasses between 2015 and 2024. Primary outcomes included technical success, major upper limb amputation – above wrist, need for digital amputation, pain relief, 30 days mortality, patency of the bypass (primary and secondary), wound healing at 12 months and amputation-free survival.

RESULTS
Thirteen bypasses were performed in 8 males and 1 female patients with median age of 65 years (range 48–77 years). All patients presented with digital gangrene and rest pain. All patients had failed endovascular revascularization. Technical success rate was 100% and there were no major perioperative complications. None of the patients needed a major amputation, although all underwent partial or complete amputation of affected digits. All patients had immediate pain relief. 30-day mortality was zero. Longest follow up period was 72 months and shortest being 2 months. No patients had recurrence of symptoms. All wounds healed fully. Primary patency was 100% at 6 months, while the overall secondary patency up to 12 months was 92%. The overall amputation free survival was 75%.

CONCLUSIONS
Surgical revascularisation with bypass to palmar arch can be safely performed with excellent patency rates in patients with critical upper limb ischemia.

BIBLIOGRAPHY