

## AB034. SOH22ABS041. Outcomes of single stage hybrid revascularization for multilevel peripheral arterial disease

Sinead Cremen, Baker Ghoneim, Sean O. Neill,  
Prakash Madhavan, Mary Colgan,  
Catriona Canning, Adrian O. Callaghan,  
Zenita Martin

Department of Surgery, St. James's Hospital, Dublin, Ireland

**Background:** Due to multilevel disease often seen in peripheral arterial disease (PAD), straightforward management options are challenging. Hybrid procedure, combining endovascular and open surgery, is an ideal strategy for managing this cohort of patients. The aims of this study were to investigate the suitability of hybrid surgery in those with multilevel PAD.

**Methods:** This is a single centre retrospective study, including all patients who underwent a single stage hybrid revascularisation for multilevel PAD in St. James's Hospital from June 1991 to January 2021. All data was collected from a prospectively maintained database. Primary outcomes were primary patency rate and secondary patency rate. Secondary outcomes were major amputation rate, 30-day mortality, and complications.

**Results:** There were 163 hybrid procedures completed over this period, on 115 patients. Twenty-six percent [30] were female. The primary patency rate at 1 year was 74% and secondary patency rate was 85%. Preoperative median ABI was 0.48 (IQR 0.31–0.63), which significantly increased to 0.72 (IQR 0.54–0.99,  $P < 0.005$ ) following intervention. 5% [8] of limbs required major amputation post operatively. Thirty-day mortality was 4% [5]. Ten percent [11] had postoperative haemorrhage, with 4% [4] requiring intervention. One point eight percent [3] experienced

respiratory complications and 2.5% [4] experienced cardiac complications.

**Conclusions:** In this cohort, simultaneous hybrid surgery for multilevel revascularisation has high primary and secondary patency rates, with significant improvement in ABI post operatively. It offers an attractive alternative to open or endovascular surgery in those with multilevel disease.

**Keywords:** Endovascular; hybrid; patency; peripheral vascular disease; revascularisation

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### Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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