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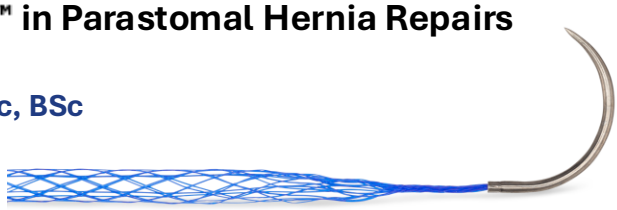
Parastomal Hernia

# The Use of DURAMESH™ in Parastomal Hernia Repairs

**Mr. Jeremy Clark FRCS, MBBS, MSc, BSc**
Nuffield Health Brighton Hospital



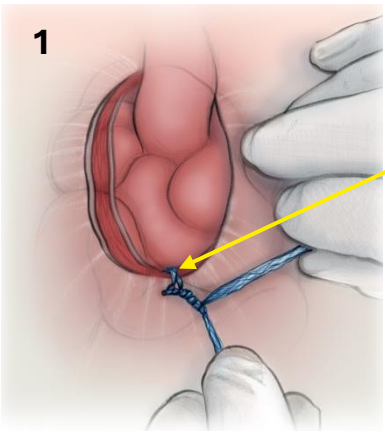
## INTRODUCTION

DURAMESH™ is the world's first device to combine the structural strength of a mesh with the placement precision of a suture. This enables both tissue approximation and rapid ingrowth, supporting a robust and early repair.
The mesh filament distributes tension evenly along the suture-tissue interface and incision line—similar to the "small bites" technique—reducing the risk of cheesewiring and tissue trauma. Its open-walled, hollow-core design maintains large pores under tension, promoting fibrovascular ingrowth and encouraging strong, long-term tissue incorporation.
These unique properties make DURAMESH™ well suited to a range of procedures including laparotomy closure, umbilical and ventral hernia repair, and trocar site closure. However, its application in parastomal hernia repair remains relatively underexplored and presents a promising new opportunity for improving surgical outcomes.

## AIMS

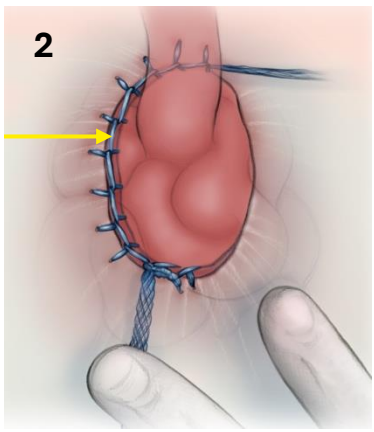
To present DURAMESH™, the first suturable polypropylene mesh, and to demonstrate a novel surgical approach for the repair of parastomal hernias. This technique aims to harness the structural advantages of mesh with the precision and versatility of suture-based placement.

## TECHNIQUE

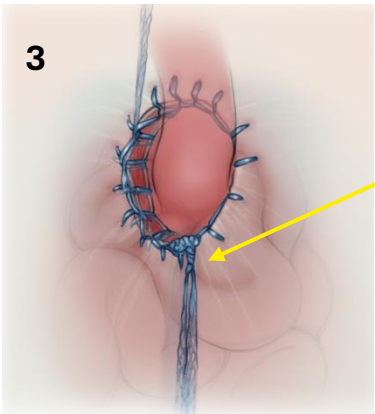



Begin by anchoring the suture using a figure-of-eight stitch, securing it with 8–10 throws to establish a stable starting point. Ensure the suture is snug but not overly tight, to minimise the risk of suture pull-through.

Proceed with a locking mattress suture technique, advancing circumferentially around the defect. Take 5–10 mm bites through the full thickness of the muscle and fascia layers, spaced at approximately 10 mm intervals.

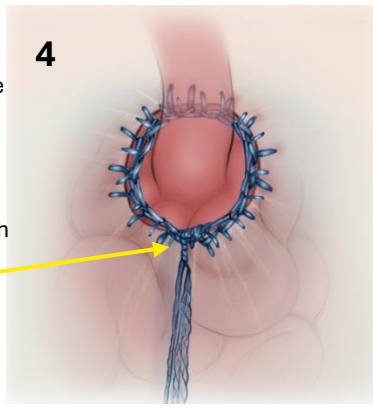



DURAMESH™ is inherently soft, with no sharp edges, thereby minimising the risk of bowel injury. It effectively reinforces the full-thickness muscle layer, providing durable structural support.




To complete the closure, tie the two ends of DURAMESH™ with a surgical knot at the original anchor, reducing the defect size. If further reduction is needed, repeat the process until the desired aperture is achieved.

For larger defects, increase tension with each bite to draw the muscle together. Use multiple overlapping layers rather than excessive tension, placing mattress sutures between previous bites to create a lattice effect for stronger reinforcement.




## CONCLUSION

In this poster, we have chosen to focus specifically on the use of DURAMESH™ in parastomal hernia repair, where we demonstrate a novel surgical technique that leverages the suturable mesh's ability to reinforce the abdominal wall while minimising complications such as suture pull-through and bowel injury. By leveraging the mesh's ingrowth potential and superior tensile strength, this method offers a promising alternative to traditional closure techniques.
This technique can also be employed for reinforcement at the time of the initial stoma formation as a prophylatic against parastomal hernia formation.

The author declares that he has no known competing financial interests or personal relationships that could have appeared to influence the work reported in this poster.