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Onlay Mesh Versus Suture Repair For Smaller Umbilical Hernias In Adults: Early Results From The SUMMER Trial

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Conclusion

This randomized clinical trial provides high-level evidence for mesh repair of umbilical hernias ≤ 2 cm. With regard to early postoperative outcomes, such as surgical site occurrences, onlay mesh repair can be considered comparable to suture repair and is safe to use for smaller umbilical hernias.

Introduction

While mesh repair is often recommended for umbilical hernias to reduce recurrence, evidence for smaller umbilical hernias remains limited.

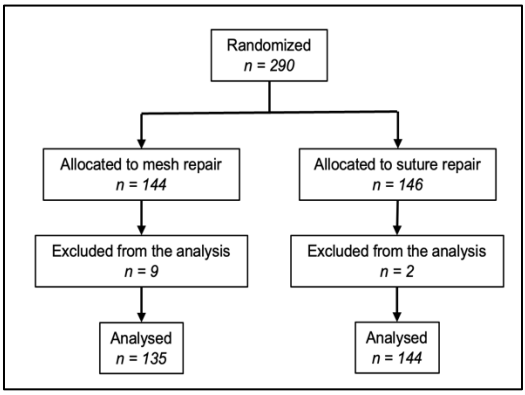
This study presents preliminary results from a randomized controlled trial comparing surgical site occurrences after suture versus mesh repair in umbilical hernias ≤2 cm.

Method

A multicenter, randomized, controlled, double-blind trial was conducted at six surgical centers across Sweden. Participants with primary umbilical hernias measuring ≤ 2 cm were randomized to undergo repair using either a 4 x 4 cm macroporous lightweight mesh placed in an onlay position or a suture repair.

The short-term secondary outcomes were surgical site occurrences and pain intensity with Numerical Rating Scale (NRS) within 30 days after surgery.

The primary outcome is hernia recurrence at 1 and 3 years and will be reported in future papers.



Results

Between 2020 and 2024, 290 trial participants were randomized.

Surgical-site occurrences (Clavien–Dindo ≥ 1) affected 32 mesh repair participants (23.7%) compared with 26 suture repair participants (18.1%), with no statistically significant increase in surgical site occurrences for mesh repair (OR 1.39; 95% CI, 0.78-2.51).

Clinically relevant surgical site occurrences (Clavien–Dindo ≥ 2) were less common in the mesh group; 2 participants (1.5%) compared with the suture group; 4 participants (2.8%).

82.0% of suture repair participants and 73.0% of mesh repair participants reported no pain (p = 0.061) on the NRS.

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