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TRANSFASCIAL MESH FIXATION WITH THE ENDO CLOSE NEEDLE FOR THE PREVENTION OF CHRONIC PAIN IN LAPAROSCOPIC VENTRAL HERNIOPLASTY

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Relevance

In laparoscopic ventral hernioplasty, the method of mesh fixation largely determines the incidence of chronic postoperative pain and of mesh displacement with subsequent recurrence. Mechanical tackers are associated with fixation-related pain, which makes it necessary to improve reliable, low-morbidity fixation techniques.

Material and methods

Outcomes were analyzed in 109 patients with postoperative ventral hernias: a comparison group of 62 patients (open hernioalloplasty) and a main group of 47 patients (improved laparoscopic hernioplasty). In the main group, the mesh was fixed transfascially with the Endo Close needle using U-shaped sutures placed 5–6 cm from the hernia ring under visual laparoscopic control. The incidence of chronic pain syndrome and mesh-related complications was assessed.

Results and discussion

Transfascial fixation with the Endo Close needle provided reliable anchoring of the mesh to the anterior abdominal wall, reducing its displacement and the risk of recurrence. The improved fixation technique reduced the incidence of chronic pain syndrome from 14.5% to 4.3%. Placing U-shaped sutures at a distance from



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the hernia ring under visual control distributed the load over a wider area and avoided the point pain typical of mechanical tacker fixation.

Conclusion

Transfascial mesh fixation with the Endo Close needle is a reliable and reproducible technique that significantly reduces chronic postoperative pain and the risk of mesh displacement in laparoscopic ventral hernioplasty, improving the functional results of treatment.