

Preliminary experience using fibrin glue for mesh fixation in 250 patients undergoing minilaparoscopic transabdominal preperitoneal hernia repair.

Authors: Santoro E, Agresta F, Buscaglia F, Mulieri G, Mazzarolo G, Bedin N, Mulieri M

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Abstract:

PURPOSE: Fibrin glue for mesh fixation has been proposed to prevent the risk of nerve injury in inguinal hernia repair. We retrospectively evaluated a series of 250 patients who underwent minilaparoscopic transabdominal preperitoneal (miniTAPP) hernioplasty (using trocars, optics, and instruments <10 mm in diameter) in whom mesh fixation was achieved using 2 mL of fibrin glue. We considered the feasibility of the technique and the incidence of complications, especially those possibly related to mesh fixation. We also compared the results with an earlier series of 245 patients in whom tacks were used to fix the mesh.

MATERIALS AND METHODS: Between April 2004 and November 2005, 250 patients underwent bilateral or unilateral miniTAPP hernioplasty with instruments, optics, and trocars smaller than 10 mm and meshes fixed by fibrin glue.

RESULTS: The mean overall operative time was 52.25 +/- 15.2 min. All the procedures were done as day surgeries. We registered one intraoperative bladder lesion and 15 cases of seroma. There were no relapses, prosthesis rejection, or infection. The mean follow-up was 13.2 +/- 6.1 months (range, 5-24 months).

CONCLUSION: On the basis of our initial experience, miniTAPP hernioplasty with a fibrin glue is

feasible, effective, and easy to perform in experienced hands, with good results without higher risk of recurrence. In addition, the fibrin fixation method seems to decrease postoperative neuralgia and reduced the incidence of postoperative seromas and hematomas.