Use of fibrin glue (Tissucol) in laparoscopic repair of abdominal wall defects: preliminary experience.

Authors: Olmi S, Scaini A, Erba L, Croce E

Publication Date: 2007

Abstract:

INTRODUCTION: The aim of this study was to establish the efficacy and tolerability of human fibrin glue (Tissucol) for the nontraumatic fixation of a composite prosthesis (Parietex) in the laparoscopic repair of small to medium-sized incisional hernias and primary defects of the abdominal wall.

MATERIALS AND METHODS: From October 2003 to October 2005, 40 patients underwent laparoscopic repair at the hands of one surgeon with expertise in laparoscopic surgery; all meshes were implanted in an intraperitoneal position. Follow-up visits were scheduled for 7 days and 1, 6, and 12 months. These included assessments for pain and postoperative complications.

RESULTS: Forty patients (24 females, 16 males) with a mean age of 50 years (range, 26-65 years) and a mean Body Mass Index (BMI) of 27 (range 25 to 30) were included in the study. Sixteen patients had incisional hernias, and 24 had primary defects. The size of the defects varied from 2 to 7 cm. Adhesiolysis was necessary in 92.5% of cases (25/40). There were no intraoperative complications or conversions. After a mean follow-up of 16 months (range, 3-24 months), no postoperative complications were observed. The mean surgical intervention time was 36 min (range, 12-40 min), with an average hospitalization time of 1 day.

CONCLUSIONS: The use of fibrin glue in the present study provided stable and uniform fixation of the prosthesis and minimized intraoperative and postoperative complications. Consequently,

laparoscopic treatment of small to medium-sized abdominal defects using this approach is our therapeutic option of choice.