Tisseel versus tack staples as mesh fixation in totally extraperitoneal laparoscopic repair of groin hernias: a retrospective analysis.

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Abstract:

BACKGROUND: The laparoscopic repair of groin hernias generally involves mesh fixation to avoid displacement and recurrence. Fixation usually uses staples that can lead to nerve injury and chronic postoperative pain. Laparoscopic repairs are associated with a risk of chronic pain of up to 22.5%. The use of fibrin glue (Tisseel) may represent an alternative method of mesh fixation preventing the risk of nerve injury.

METHODS: Sixty-six patients had groin hernia repair using a totally extraperitoneal (TEP) laparoscopic procedure. Mesh fixation was achieved using 2 ml of fibrin glue. Comparison was made with an earlier series of 102 patients operated on according to the same procedure in which mesh fixation used tack staples. Complications, length of stay, recurrence, and postoperative chronic pain were assessed.

RESULTS: No difference was found between the two series, except there was a significantly higher rate of postoperative chronic pain in the staples series (14.7 vs 4.5%, p = 0.037) and there was one recurrence (1.5%) in the fibrin glue group of patients.

CONCLUSIONS: Fibrin glue achieved an adequate mesh fixation with a lower incidence of chronic postoperative pain. Although a prospective randomized study is needed, Tisseel appears to be an alternative to staples for mesh fixation and may help reduce the postoperative pain problems after

hernia repair.