Fibrin glue fixation of bioactive extracellular matrix mesh compared with soft prolene mesh for laparoscopic hernia repair.

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Abstract:

INTRODUCTION: A comparison between soft prolene mesh and bioactive extracellular matrix prosthetic mesh fixed and secured with fibrin glue was studied. METHODS: A retrospective study of 160 patients operated upon by a single surgeon at the same institution over the past year was reviewed. There were 36 patients who had fibrin glue used as the sole means to fix the mesh in place during laparoscopic hernia repair. The patients were further subdivided into the type of mesh used, age, operative time, and postoperative events, and the results were analyzed. RESULTS: Bioactive extracellular matrix mesh was used in 18 patients and 23 repairs. There were 21 indirect hernias and 2 direct hernias repaired. Age averaged 36 years (17 to 63) and operative time averaged 30 minutes (19 to 45). Three patients experienced mild bladder gburningg and 3 patients had mild groin pain postoperatively. No recurrences have occurred. gSoftg prolene mesh was used in 18 patients and 23 repairs. There were 14 indirect hernias and 9 direct hernias repaired. Age averaged 50 years (35 to 72) and operative time averaged 26 minutes (20 to 40). Three patients had prolonged groin tenderness with or without ecchymosis lasting 3 weeks and 2 patients needed a foley catheter for 1 week for urinary retention. No recurrences have occurred. CONCLUSIONS: Fibrin glue has been used as a fixation technique for laparoscopic hernia repair with mesh. The bioactive extracellular matrix mesh patients had a slight increased groin/bladder discomfort that subsided in time. Neither group had a hernia recurrence noted over the study time. The use of biologic materials in the repair of hernia is an intriguing concept. It will be needed for studying long-term efficacy.