

Fibrin Glue Versus Polypropylene Suture for Mesh Fixation in Lichtenstein Inguinal Hernia Repair

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Abstract

Background: Lichtenstein hernia repair is the most common procedure for hernia repair. An ideal mesh should restore abdominal function, be integrated physiologically into the abdominal wall based on max biocompatibility, be without serious long-term complications like chronic groin pain. The search for the most appropriate method to fix mesh and to reduce complications is still on and this study aims for the same. The current study aimed to analyze the fibrin glue versus polypropylene sutures for inguinal hernia repair. **Methods:** This comparative prospective study was conducted in the Department of General Surgery, Prathima Institute of Medical college, Nagnoor, Karimnagar. Patients were selected based on the inclusion and exclusion criteria and randomly allotted in two groups Fibrin glue group and the proline group of n=40 cases each. Postoperatively the patient was assessed for complications, recovery time, and Data collected was statistically analyzed using an appropriate statistical test, and $p < 0.05$ was taken significantly. **Results:** the side of involvement of hernia in group I 62.5% were with right side involvement and 30% were of left side hernia and 7.5% cases were of bilateral involvement. In group II the right-side involvement was 57.5% cases and the left side in 37.5% and 5.0% bilateral involvement was noted. In group, I direct hernia was present in 50% of cases and indirect hernia in 50% cases whereas in group II direct hernia was found in 45% of cases and indirect hernia in 55% of cases the differences were statistically not significant. This study showed a mean time of 52.3 ± 9.05 mins among the proline group and 45.76 ± 5.35 minutes in the fibrin glue group to complete the surgery. **Conclusion:** it can be concluded that Lichtenstein's hernia repair with mesh fixation with fibrin glue has advantages such as decreased mean duration of surgery, decreased incidence of hematoma, and seroma formation as compared to the conventional proline sutures. The incidence of postoperative pain and chronic groin pain was found to occur less in the case of fibrin mesh fixation which was evident with lesser VAS scores.