

### **Treatment of Bilateral Inguinal Hernia - Minimally Invasive versus Open Surgery Procedure**

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#### **Abstract**

*Objectives:* The aim of this study is to evaluate and compare the treatment outcomes of the bilateral inguinal hernia repair in one stage using minimally invasive technique (totally extraperitoneal) and conventional surgery (Lichtenstein).

*Materials and methods:* Records from all hospitalized cases in our institution between 2006 and 2011 that underwent surgery having the diagnosis of bilateral inguinal hernia were analysed.

*Results:* The study consists of two groups selected by means of the used procedure: the study arm which is laparoscopic (234 cases) and the control arm that consists of Lichtenstein procedure (91 cases). One conversion was recorded due to difficult dissection (0.4% of cases). There were complications reported in 2.5% cases in the laparoscopic group and 27.4% complications noted in the conventional group ( $p<0.01$ ). Reinterventions were logged in 1.7% cases in the laparoscopic group and 2.1% reinterventions in the open group ( $p<0.01$ ). The postoperative hospital stay was 2.1 days in the laparoscopic group and 4.7 days for the open procedure. Mortality was not recorded.

*Conclusions:* In our department the procedure of choice for bilateral inguinal repair is the laparoscopic approach (TEP) which has a 10 fold decrease in complications rate than Lichtenstein operation and also a shortening by half of the hospital stay. Hernia recurrence is the same for both procedures.

**Key words:** laparoscopic, totally extraperitoneal, Lichtenstein procedure, inguinal bilateral hernia, minimally invasive

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