Open versus Laparoscopic-with stress test- inguinal hernia repair in pediatric age group a comparative prospective study

Abstract

Inguinal hernia repair is one of the most common general surgical operations performed by pediatric surgeons and evolution of hernia repair throughout history has led to the conclusion that a simple removal of the hernia sac "herniotomy" is sufficient for treatment of pediatric inguinal hernias.

The classic inguinal approach for treatment of inguinal hernia has proven its efficacy in all aspects of treatment: adequate access to the hernia sac and its neck, minimal damage to the gonads, low recurrence rate and an acceptable scar.

Recently, minimally invasive techniques using laparoscopy have provided an alternative method for surgical repair of pediatric inguinal hernias. Early results using laparoscopy had a higher recurrence rate and a longer operative time, but refinements in the techniques used and continued experience have lowered these risks. Advantages of laparoscopic repair are fewer steps, less dissection, and better visual exposure of anatomy. The laparoscopic approach also offers the surgeon the ability to easily examine the contralateral groin and to repair any hernia found.

Despite of the higher recurrence rate detected early in the start of this study, no recurrences reported after the application of the following modifications: 1-Type of suture material: in these early cases we used an absorbable suture material (vicryl), then we shifted in the following cases on non-absorbable one(prolen). 2- complete disconnection of the sac before performing the purse string suture. 3- narrowing of the internal ring by one or two non absorbable mono filamentous material laterally before the purse string suture.