

## SIV6: PIRS TECHNIQUE IN TREATMENT OF INGUINAL HERNIA IN CHILDREN

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**Background** Laparoscopic approach to inguinal hernia treatment in children is becoming more commonly used in everyday practice. Percutaneous internal ring suturing (PIRS) is one of minimally invasive one-port techniques which involves closure of internal inguinal ring under visual control using thread introduced through the skin.

**Materials and methods** Retrospective analysis of cases treated with laparoscopic approach for inguinal hernia in our department from 2014 till the end of April 2017.

**Results** From 2014 till the end of April 2017, in Department of Pediatric Surgery and Urology, there were 140 children treated (100 boys and 40 girls), 143 surgeries performed and 181 internal inguinal rings closed. 47 children were diagnosed with left-sided hernia, 55 with right-sided hernia and 38 with bilateral hernia. 123 children were operated using laparoscopic technique (medium age: 53,6 months) and 17 children by open approach (medium age 65,14 months). Bilateral hernias were most common among children under the age of 1 regardless of sex (50% of hernias among both boys and girls younger than 1 year old were bilateral). In the time covered by this study 5 intraoperative complications in the form of blood vessel puncture were observed (in one case conversion was required). Additionally 2 cases of recurrent hernia after laparoscopic approach were diagnosed. It is vital to notice that 22 patients with preoperative diagnosis of unilateral hernia had intraoperative discovery of open contralateral canal. In 1 patient after open surgery contralateral hernia was later discovered. Additionally, while closing inguinal ring, some other procedures were performed: removal of hydrocele (4 patients), closure of umbilical ring hernia (11 patients).

**Conclusions** Percutaneous internal ring suturing is an effective and safe procedure providing excellent cosmetic result and allowing to avoid future surgery due to contralateral hernia

**Key words** inguinal hernia, Percutaneous Internal Ring Suturing (PIRS)