## SIV11: PERCUTANEOUS INTERNAL RING SUTURING IN PEDIATRIC INCARCERATED INGUINAL HERNIA

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**Background** Laparoscopy provides an alternative approach to the management of inguinal hernia in children. Different laparoscopic techniques for inguinal hernia repair have been described, including the percutaneous internal ring suturing (PIRS). Herein the role of PIRS in the repair of pediatric incarcerated inguinal hernia is analyzed.

**Materials and methods** A retrospective review was conducted including all children presenting with incarcerated inguinal hernia and submitted to laparoscopic hernia repair by percutaneous internal ring suturing between 2012 and 2016.

Results of 58.4 ± 58.5 days (range, 24 to 237 days). In 9 patients (75%) the hernia content was the ovary and in 3 patients (25%) the hernia content was the bowel. One case of bowel incarceration occurred immediately after failed open repair. In all patients, a 3 mm instrument was introduced through the same umbilical incision used for the endoscope in a single-port fashion. The hernia content was reduced using a combined manual and laparoscopic-assisted approach. Laparoscopic inspection allowed assessing the viability of the incarcerated content. Moreover, Percutaneous internal ring suturing was performed after the reduction in all cases. The mean operative time was 55.5 ± 17.9 minutes. There were no intra- or post-operative complications. The median hospital stay was 1 day. At a mean follow-up of 27.3 ± 12.5 months, there was only one patient with an umbilical granuloma and there were no recurrences or testicular atrophies.

**Conclusions** The percutaneous internal ring suturing is safe and feasible, even FOR reduction of pediatric incarcerated hernias and has a consistently good outcome in the midterm follow-up.

**Key words** laparoscopy, percutaneous, inguinal hernia, incarcerated hernia