

PIII10: EXPERIENCE IN THE PRACTICE OF PEDIATRIC MINIMALLY INVASIVE SURGERY: A REVIEW OF THE LAST FIVE YEARS AT OUR DEPARTMENT

Elisa Zolpi*¹, Cosimo Bleve¹, Maria Luisa Conighi¹, Valeria Bucci¹, Lorenzo Costa¹, Lorella Fasoli¹ and Salvatore Fabio Chiarenza¹

E-mail: Elisa Zolpi — zolpielisa@yahoo.it

¹Department of Pediatric Surgery and Pediatric Minimally Invasive Surgery and New Technologies, San Bortolo Hospital, Vicenza, Italy

Background Minimally invasive surgery (MIS) is one of the most significant advances of the twentieth century. The purpose of our study was to review the clinical indications to the MIS, the temporal variations of the duration of surgery, the percentage and rate of conversion to open surgery and post-operative complications.

Materials and methods The current retrospective study was conducted at our hospital and comprised of MIS cases performed by different surgeons from January 2011 to December 2016.

Results We performed a total of 1062 minimally invasive procedures in patients younger than 18 years.

Of these procedures were 973 laparoscopy; 61 thoracoscopies and 28 retroperitoneoscopy.

Among the major clinical indications to laparoscopy find: simple and complicated acute appendicitis (360); varicocele

(216), endoabdominal testicle (128), GERD (59), adnexal diseases (38), cholelithiasis (30), intrinsic stenosis of the ureteropelvic junction (14), extrinsic hydronephrosis (30) and a miscellany between intestinal and abdominal neonatal malformations, cystic lesions, Meckel's diverticulum, intestinal invaginations, etc...

For thoracoscopic procedures were as follows: 18 pleural empyema, 20 procedures in 16 esophageal atresia, 11 congenital cystic adenomatous malformation of the lung (CCAM), 9 bullous emphysema, 2 esophageal duplications, 1 mediastinal lymphangioma.

The retroperitoneoscopic procedure was performed in 16 patients with intrinsic stenosis of the ureteropelvic junction and 12 for heminephrectomy-nephroureterectomy.

We analyzed the type of surgery performed, time of surgery, hospital stay and complications. We had an improving trend in surgical time, the conversion rate and intra and postoperative complications, even among different surgeons.

Conclusions The authors also describe their experience with minimally invasive surgery and report the results of 1062 MIS procedures performed during the last 5 years. In many minimally invasive procedures the outcome has been favorable; the rates of conversion was very low with no significant postoperative complications, especially in the neonatal period. The use of laparoscopy facilitated not only the therapeutic efficacy but also the diagnostic approach in certain diseases.

Key words MIS, retroperitoneoscopy, thoracoscopy, laparoscopy