

## **SVII6: RETROPERITONEOSCOPIC HEMINE-PHRECTOMY: OUR EXPERIENCE AND DESCRIPTION OF SOME CHALLENGING CASES**

Cosimo Bleve\*<sup>1</sup>, Valeria Bucci<sup>1</sup>, Maria Luisa Conighi<sup>1</sup>, Francesco Battaglino<sup>1</sup>, Lorella Fasoli<sup>1</sup>, Lorenzo Costa<sup>1</sup> and Salvatore Fabio Chiarenza<sup>1</sup>

E-mail: Cosimo Bleve — [cosimo.bleve@aulss8.veneto.it](mailto:cosimo.bleve@aulss8.veneto.it)

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

**Background** Nephrectomy and Heminephrectomy represent nowadays the most common urological indications for minimally invasive surgery (MIS) in children. Laparoscopic retroperitoneal partial nephrectomy in children remains a complex technique with no great diffusion among pediatric surgical centers. We analyzed our experience with retroperitoneal laparoscopic nephrectomy describing some complex cases treated

**Materials and methods** We retrospectively reviewed the clinical records of patients studied for kidney disease between 2005-2016 in our department who've required surgical treatment. 312 (181m, 131f) patients were studied for congenital anomalies and urologic diseases of upper urinary tract: 69 (29M,40F) underwent heminephrectomy: 30 open, 39 retroperitoneoscopic(RP). Analyzing the retroperitoneoscopic group, the indication for surgery were: dysplastic kidney (29 pts), vesico-ureteral reflux nephropathy (4 pts), ectopic ureter (5pts) cystic disease of the kidney (2pts). three cases presented an horseshoe kidney, 1 a renal triplicities and 1 case an imposing hydroureteronephrosis associated to a giant ureterocele

**Results** We analyzed the data of 39 patients underwent retroperitoneoscopic partial nephrectomy. Thirty underwent upper pole nephrectomies, 9 to lower pole heminephrectomies; 19 on the left side, 20 on the right.

Age at surgery ranges from 3months to 5 years. Median operative time was 120'. Conversion was not needed in any patient. no significant blood loss was observed. Postoperative course was uneventful except for three cases. We recorded an urinoma treated conservatively and 2 symptomatic ureteral stumps, one of this required a laparoscopic treatment. We recorded very good esthetical results, less need of analgesia, faster recovery, lower length of stays. Median hospital stay was of 4 days; shorter compared to 7 day of open approach.

**Conclusions** MIS now represents the gold standard technique to perform partial nephrectomy in children with duplex kidney. Retroperitoneoscopy remains a technically challenging procedure requiring a correct learning curve. There is no agreement about what is the best technique between laparoscopic or retroperitoneoscopic approach. According our experience comparing laparoscopy with retroperitoneoscopy the last one is more difficult (above all in the first cases) but more convenient in case of conversion and to treat potential complications (urinoma, bleeding etc.).

**Key words** partial nephrectomy, duplex kidney, vesico-ureteral reflux