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*abstract*

## **Laparoscopic Nephrectomy and Kidney Resection in Children: Single-center experience**

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## Laparoscopic Nephrectomy and Kidney Resection in Children: Single-center experience

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**Introduction:** Objective was to present the experience of laparoscopic nephrectomies and kidney resections in children.

**Methodology:** There were 49 minimally invasive surgeries for renal tumors between July 2015 and August 2024 (109 months). There were 23 (47%) boys and 26(53%) girls who underwent 34 nephrectomies and 15 kidney resections. The median age of patients was 54 (38; 75) months.

**Results:** In the laparoscopic nephrectomy group, the median surgery time was 150 (70-370) min, blood loss – 15 (5-50) ml. Total resection was confirmed in all patients. In the group of minimally invasive kidney resections, these values were 330 min and 22 ml, respectively. Histological examination confirmed total resection in all patients. In both groups, none patient developed postoperative complications.

Event-free survival was 86.72%, and local recurrence-free survival was 95.8%. One patient underwent bilateral resection. The patients did not meet the criteria of the SIOP RTSG – 2016 UMBRELLA protocol. In all cases, RO resection was performed. In 31 cases, the histological diagnosis was Wilms' tumor.

**Conclusion:** Minimally invasive nephrectomies and resections are safe in children in case of careful patient selection.