

SVII2: THE MANAGEMENT OF CROSSING VESSELS IN CHILDREN: LAPAROSCOPIC DISMEMBERED PYELOPLASTY WITH VASCULAR BUNDLE TRANSPOSITION

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Background No gold standard exists on how to deal with crossing vessels (CVs) in patients operated on due to uretero-pelvic junction (UPJ) obstruction. The aim of the study is to assess the outcomes of laparoscopic dismembered pyeloplasty with dorsal transposition of the CVs.

Materials and methods Prospectively collected data from 2 departments were reviewed. Inclusion criteria were: 1) transperitoneal laparoscopic approach, 2) dismembered pyeloplasty, 3) the same operating paediatric urologist and perioperative protocols, and 4) follow up > 1 year. In the case of CVs, pyeloplasty with the vessel transposition was performed. The anastomosis was done by means of interruptive sutures (polyamide 5.0) and a double-J catheter was left in all cases. Forty eight children (mean age 9.9 years) met the criteria. Patients were divided into 2 groups: group 1 with CVs and group 2 without CVs. Any surgical re-intervention at the uretero-pelvic junction was defined as failure. Fisher's exact test was used for the statistical analysis.

Results The overall re-intervention rate was 3/48 (6.25%). Endopyelotomy was done in 3 patients and in 1 re-do pyeloplasty was needed afterwards. CVs were identified in 28/48 (58%). The mean operation time was 152 min in group 1 vs. 161 min in group 2 ($p>0.5$). Re-intervention was needed in 2/28 (7.1%) in group 1 and 1/20 (5%) patient in group 2. ($p>0.05$).

Conclusions Crossing vessels should be meticulously looked for during pyeloplasty in older children. Dismembered laparoscopic pyeloplasty with dorsal transposition of the CVs is a successful method in those patients.

Key words pyeloplasty, crossing vessels, hydronephrosis, laparoscopy, children