

SV18: FEASIBILITY AND BENEFITS OF THE RETROPERITONEAL LAPAROSCOPY IN THE TREATMENT OF URETEROPELVIC JUNCTION OBSTRUCTION IN CHILDREN UNDER TWELVE MONTHS OF AGE

Anthony Kallas-Chemaly*¹, Matthieu Peycelon¹, Liza Ali¹, Christine Grapin-Dagorno¹, Elisabeth Carricaburu¹, Pascale Philippe-Chomette¹, Goharig Enezian¹, Annabel Paye-Jaouen¹ and Alaa El-Ghoneimi¹

E-mail: Anthony Kallas-Chemaly — anthony_chemaly@yahoo.com

¹Department of Paediatric Surgery and Urology, Robert-Debré University Hospital, Assistance Publique Hôpitaux de Paris (APHP); Paris Diderot University, Sorbonne Paris Cité, Paris, France

Background The advantage of laparoscopy in the treatment of ureteropelvic junction obstruction (UJPO) remains controversial in children under twelve months of age. The aim of this study was to evaluate the feasibility and benefits of retroperitoneal laparoscopy (RL) in this age group in order to standardize management in our institution.

Materials and methods Between 2012 and 2016, we performed 209 pyeloplasties: 138 by laparoscopy and 71 by open access. From 2012, the choice of the operating technique was decided according to the laparoscopic experience of the surgeon; two surgeons operated by laparoscopy all children less than twelve months of age while others operated them by posterior lumbotomy (PL). The RL is standardized and performed by 3 trocars (5, 3, 3). Intra- and postoperative parameters have been analyzed retrospectively. Statistical tests: Pearson, Student and Mann-Whitney.

Results During this 5-year period, 18 RL and 50 PL were included with a median follow-up of 9.5 months (3–26). In the RL group, postoperative drainage was performed by double-J stent (10 patients) or external transanastomotic stent (8 patients). No conversion or redo pyeloplasty have been listed in this group. A redo surgery was recorded for the PL group (UPJ stenosis). Hospital stay and consumption of paracetamol and nalbuphine were significantly lower in the RL group (2.2 days vs. 1.6, $p = 0.017$; 2.2 vs. 1.4, $p = 0.004$, 1.4 vs. 1.1, $p = 0.028$ respectively) while operative time was significantly longer (171.8 min vs 85.3, $p = 0.001$).

Conclusions In the hands of experienced laparoscopic surgeons, RL is feasible in children less than one year of age without added morbidity. Subject to the retrospective character of our study, hospital stay is longer in the PL group.

Key words ureteropelvic junction obstruction, retroperitoneal laparoscopy, children, feasibility, benefits