

A PROSPECTIVE STUDY OF LAPAROSCOPIC VERSUS OPEN SURGERY FOR PAEDIATRIC HYDROCOELES

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Aim: Standard of surgical practice for paediatric hydrocoele is resection of a segment of patent processus vaginalis (PPV) and drainage of the scrotal fluid. The groin incision is often 3-4 cm long. These incisions grow with time and can reach 10 cm or more in an adult. We would like present a comparison of laparoscopic excision of PPV (Lap PPV) to that of open approach.

Materials and Methods: This was a prospective study and human ethics was obtained from relevant hospital ethics/advisory committees. Over a 6-year period (Mar 2009-Aug 2015), 30 Lap PPV cases (including 2 recurrent and 3 bilateral) was compared to 61 open unilateral PPV cases. Open PPV was performed for: (a) parents' preference or (b) medical insurance carrier refusing Lap PPV approach because of increased cost.

Lap PPV was done via trans-peritoneal herniotomy with a 5mm scope and 3mm grasper and scissors. The patients went home the same day. Oral paracetamol/ibuprofen combination was written for post-op analgesia 8-hourly for 3 days (9 doses).

Main results: There were no conversions, no minor/major complications and no recurrences in either group. Open PPV procedure time was 14-25 minutes (average 19.8 minutes) and for Lap PPV 15-30 minutes (average 23.5 minutes), excluding bilateral cases ($p=0.1$).

When questioned one week later, the parents reported that the children who underwent open PPV operations required 3-9 oral analgesic doses (average 4.2) and those undergoing Lap PPV required 3-9 doses (average 4.7) ($p=0.57$).

At 6 months post surgery, there was no visible scar with Lap PPV cases.

Conclusion: Lap PPV excision appears to be at least equivalent to open approach. Although, aesthetically more superior, it was expected to be less painful than open surgery but this was not noted in this cohort.