

## EARLY EXPERIENCE OF ROBOTIC RECTOPEXY IN THE PAEDIATRIC POPULATION

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**Introduction and aims:** A number of procedures have been described for the management of refractory full thickness rectal prolapse (FTRP). Trans-abdominal rectopexy (TARP) or laparoscopic assisted rectopexy (LARP) are standard approaches currently. The need for precise dissection, insertion of multiple sutures, and the use of a single operative field lends itself to robotic surgery. Experience in robotically assisted rectopexy (RARP) has been obtained in adult practice demonstrating favourable outcomes. Little is known for paediatric practice. The aim of this study was to review early experience from a single unit.

**Methods:** Under the proctorship of an adult colorectal surgeon with considerable experience with this procedure, all children with refractory FTRP underwent RARP from June 2014-December 2015. Details including length of procedure, length of stay, early complications were retrospectively reviewed.

**Results:** 5 children (4 male; 1 female), mean age 10.5 years (5-14.5) underwent RARP in the time period of the study. All had FTRP but 4 had associated problems: Ehlers danlos 1, severe autism 2, OCD 2, neurological abnormalities 1, urinary problems 1. The mean operative time was 156 mins (range 90- 180) and the mean in-patient stay was 2.5 days (range 1-4). With a mean follow up of 12.2 months (3-19) there has been one limited recurrence in a child who has ritualistic straining behaviour. Other complications included one urinary tract infection and one patient with known pre-existing urinary problems who had postoperative urinary retention.

**Conclusion:** Robotic rectopexy is a feasible operation in children. The operative time and length of stay are acceptable. The complications are no greater than those published for TARP or LARP. As with all minimally invasive procedures there is a learning curve, but this is a procedure where robotic surgery may confer benefit.