Video **1**

HOW TO ACHIEVE A 3% LEAK RATE IN ILEO-ANAL POUCH SURGERY

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Aims: The construction of an ileo-anal pouch in children requires a different procedure to the double stapling technique used in adults. A video describing the author's technique is presented, emphasising technical steps which have led to a low leak rate.

Technical differences.

- 1. The procedure commences with the child prone.
- 2. Gelpi retractors are inserted into the anus.
- 3. The dissection is submucosal to the top of the anus, commencing either 5mm above the ano-cutaneous margin for non-polyposis cases, or at the ano-cutaneous margin for polyposis.
- 4. The dissection breaks into the close rectal plane at the top of the ansu; there is no "muscle cuff".
- 5. Dissection continues to the peritoneum in this plane.
- 6. Child is turned into Lloyd-Davies.
- 7. Laparoscopically, with the harmonic scalpel, dissection proceeds inside the mesorectum; this is different to the TME plane. The different planes are illustrated.
- 8. The two fields are united and the rectum is retrieved into the peritoneum.
- 9. The ileal J pouch is passed through the pelvis using a laparoscopic grasper.
- 10. The pouch is anastomosed within the anus with PDS sutures.
- 11. No drains are used.
- 12. The pouch is diverted for 6 weeks then the ileostomy is closed.

Outcomes: 99 children have had 102 ileal pouches constructed with this technique. There have been three anastomotic leaks and two pouch vaginal fistulae. The results suggest this technique is preferable to double stapling in children.