

Abstracts

European Pediatric Colorectal and Pelvic Reconstruction Meeting

Stockholm, Sweden, 22-24 October, 2025



**Karolinska
Institutet**

Thursday 23 October

16:00-17:00 Session 5 – Abstracts – Case presentations

Moderators: Jan Hendrik Gosemann and Jenny Oddsberg

HSCR/ COLORECTAL

1. Rectal Biopsy Forceps, a Cheap and Sustainable Method for Diagnosing Hirschsprung's Disease- Sigrid Blom (presenting), Manouk Backes, Ivo de Blaauw, Roxana Rassouli-Kirchmeier
2. Artificial Intelligence Tool for Hirschsprung Disease Diagnosis- Nhu Chao, Filipa Jalles, Ilana Borison, Jacob Sandler, Satya Shah, Anirudh Addepalli, Silvina Matysiak, Recai Yilmaz, Andrea Badillo, Christina Feng, Christopher Rossi, Marc A. Levitt
3. Total Laparoscopic Swenson Pull-Through for Rectosigmoid Hirschsprung Disease: Lessons Learned from 36 Consecutive Patients- Dotlacil V., Rouskova B., Pos L., Skaba R., Department of Paediatric Surgery, Second Faculty of Medicine, Charles University and Motol University Hospital, Prague
4. Preliminary Results of Modified Colonic Dissection in Definitive Treatment of Hirschsprung's Disease: How to get the best from Swenson and Soave?- Przemyslaw Galazka
5. A Case Series with Longitudinal Observation of Growth in Children with Total Colonic Aganglionosis TCA within the first 5 Years of Life- M Leisner, S Märzheuser, J Lindert, Paediatric Surgery University Medical Center Rostock, Rostock, Germany
6. A Rare Case Of Hirschsprung's Disease Followed By Rectovaginal (Ano-Vestibular) Fistula With Consecutive Sideropenic Anemia In 2-Year-Old Female Child- Risto Simeonov^{1,2}, Kamelija Simeonova³, Martin Angelov³, Vladimir Avramovski⁴, Biljana Choneska-Jovanova^{5,2} 1PHI "Acibadem Sistina", Clinical Hospital, Department of Pediatric Surgery, Skopje, Macedonia 2Faculty of Medical Sciences, "Goce Delchev" University - Shtip, Shtip, Macedonia 3PHI "Acibadem Sistina", Clinical Hospital, Skopje, Macedonia 4PHI "Acibadem Sistina", Clinical Hospital, Department of Digestive Surgery, Skopje, Macedonia 5PHI "Acibadem Sistina", Clinical Hospital, Department of Pediatrics' Hemato-oncology, Skopje, Macedonia
7. Case series ReKiSo– Transabdominal Rectal Sonography in Pediatric Colorectal Disease: Interrater Reliability of Bedside Assessment of Faecal Load- Naemi Kurzweil, Stefanie Märzheuser, Judith Lindert, Department of Paediatric Surgery Rostock, University Medicine Rostock
8. Timing of Colectomy and Surgical Outcomes in Pediatric Patients with Ulcerative Colitis- Andreina Giron, MDa; Zoe Flyer, DOa; John Schomberg, PhD, MPH; Zhuo Chen, PhDa; Donald Shaul, MDa; Peter T. Yu, MD, MPH, B; Hira Ahmad, MDa,b. a. Children's Hospital of Orange County Division of Pediatric Surgery, Orange, CA, USA. b. University of California Irvine Department of Surgery, Orange, CA, USA.

9. Robotic-Assisted Ileocecectomy in Pediatric Crohn's Disease: A Multidisciplinary Approach to Enhanced Recovery and Surgical Outcomes- Zoe Flyer, DO¹; Andreina Giron, MD^{1,2}; Ashley Bone, CPNP¹, Andreina Urrutia Gutierrez BSN¹, Donald Shaul MD¹, Hira Ahmad, MD^{1,2}. 1. Children's Hospital of Orange County Division of Pediatric Surgery, Orange, CA, USA. 2. University of California Irvine Department of Surgery, Orange, CA, USA.

1. Rectal biopsy forceps, a cheap and sustainable method

Authors: Sigrid Blom (presenting), Manouk Backes, Ivo de Blaauw, Roxana Rassouli-Kirchmeier

Rectal suction biopsies (RSB) are the standard method for diagnosing Hirschsprung's disease. However, some authors report difficulties in handling the suction devices (1), some parts of the instruments are not reusable and overall the instruments and disposable parts are pricy.

For more than 25 years we have been using a simple, cheap and sustainable technique. During the conference we would like to introduce the use of a rectal biopsy forceps (RBF) and will focus on the last 10 years pointing out the advantages and also the pitfalls of this approach.

In summary we think using RBF adequately, plastic waste and extra costs can be prevented. Furthermore, re-usable instruments from different companies can be applied, which facilitates daily practice, also especially in times where availability of disposable instruments have become a major issue.

2. Artificial Intelligence Tool for Hirschsprung Disease Diagnosis

Authors: Nhu Chao, Filipa Jalles, Ilana Borison, Jacob Sandler, Satya Shah, Anirudh Addepalli, Silvina Matysiak, Recai Yilmaz, Andrea Badillo, Christina Feng, Christopher Rossi, Marc A. Levitt

Introduction: Hirschsprung disease requires accurate histopathological identification of ganglion cells. Traditional manual analysis is time-intensive, subject to inter-observer variability, and limited by specialist availability. This project aims to develop an AI-based tool to detect ganglion cells in H&E stained biopsy slides using a Convolutional Neural Network (CNN), with the goal of improving diagnostic accuracy and accessibility, particularly in resource-limited settings.

Methods: A CNN was trained using histological image tiles, with systematic variation of tile size, color format, normalization, and network architecture. Model performance was evaluated based on sensitivity, accuracy, and positive predictive value (PPV), with emphasis on maximizing sensitivity to reduce false negatives. Additionally, a web-based application was also developed to enable clinicians to upload images and receive automated diagnostic predictions with confidence scores.

Results: Biopsy slides from three patients (100 slides each) were used, with 12 H&E stained rectal biopsies slides selected for training and testing. Multiple configurations were evaluated, including 4 tile sizes, 3 color formats and 3 CNN architectures of increasing depth and parameter count. The best-performing model utilized 256×256 grayscale tiles and a deep CNN architecture. Model convergence techniques were applied to enhance stability in ganglion cells detection. The final model achieved a 0.73 sensitivity, 0.59 accuracy, and 0.65 PPV. Grayscale input and increased network complexity improved performance.

Conclusion: This AI tool represents a promising step toward automating HD diagnosis, with ongoing work focused on model refinement and hypertrophic nerve detection.

3. Total Laparoscopic Swenson Pull-Through for Rectosigmoid Hirschsprung Disease: Lessons Learned from 36 Consecutive Patients

Authors: Dotlacil V., Rouskova B., Pos L., Skaba R.

Department of Paediatric Surgery, Second Faculty of Medicine, Charles University and Motol University Hospital, Prague

Aim of the study: Transanal (TA) and laparoscopically assisted (LSA) Swenson procedures with a transanal dissection step have become widely adopted in the treatment of Hirschsprung's disease (HD). However, prolonged anal canal stretching during TA may compromise sphincter function, and TA resection alone is limited in terms of resection length and visualization of the pulled-through bowel. A fully laparoscopic approach may overcome these limitations.

The study aimed to assess further experience and outcomes with total laparoscopic Swenson pull-through.

Methods: We retrospectively reviewed patients with rectosigmoid HD who underwent definitive surgery between April 2021 and December 2024. Data collected included demographics, surgical details, length of hospital stay, postoperative complications graded by the Clavien-Madadi classification (C-M), and follow-up duration.

Main results: A total of 36 patients (11 females, 30.6%) were included. Twenty patients (56%) underwent primary pull-through without a preceding stoma. The median age at surgery was 233 days (IQR 72.5–544.25). Median operative time was 205 minutes (IQR 164–255.5) for primary procedures and 192 minutes (IQR 166–206.25) for staged procedures ($p = 0.25$). Five patients (13.9%) experienced postoperative complications, including two requiring reoperation. Median length of hospital stay was 7 days (IQR 6–8), and median follow-up was 29.5 months (IQR 20.75–36).

Conclusions: Total laparoscopic Swenson pull-through offers excellent visualization, preserves anal canal integrity by avoiding transanal overstretching, facilitates adequate resection length and secure coloanal anastomosis, and ensures proper orientation of the pulled-down colon, thereby preventing torsion. In our cohort, the procedure was associated with low complication rates.

INDEX WORDS: Hirschsprung's disease, laparoscopy, pull-through, Swenson

4. Preliminary results of modified colonic dissection in definitive treatment of Hirschsprungs disease: how to get the best from Swenson and Soave?

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Affiliation: Department of Pediatric Surgery, L. Rydygier`s Collegium Medicum, Nicolaus Copernicus University, Bydgoszcz, Poland

Aim: According to patients safety culture during definitive treatment of aganglionosis we developed technique modification to eliminate hazardous elements during colonic dissection. The aim is to present a modified surgical technique and its preliminary results.

Technique and case series description: After securing the anal canal a rectal mucosectomy (Soave-like-part) was performed from 10:00 to 2:00 o'clock position. Remaining circumference of the rectum was dissected in the full thickness (Swenson-like-part). The submucosal together with full-thickness dissection was conducted proximally to the level of the peritoneal reflection. Transition of muscular sleeve at the level of peritoneal reflection was easily identifiable and the peritoneal cavity was entered. From 2020 to 2025 – out of 24 patients, 14 (9 boys, 5 girls) were operated with the modified method with the median age of 8 months (3 cases with previous colostomy and 1 ileostomy in TCA). There were no intraoperative complications apart from wrong level of ganglionic bowel assessment in one case. In the follow-up 4 patients required sphincter Botox injection, one patient required serial dilatations. No urological problems were noted.

Conclusions: Presented technique can increase patients safety during dissection especially when shifting from Soave to full Swenson technique of colonic dissection. Further studies are needed.

5. A Case Series with Longitudinal Observation of Growth in Children with Total Colonic Aganglionosis TCA within the first 5 years of life

Authors: M Leisner, S Märzheuser, J Lindert **Institutional affiliations** Paediatric Surgery
University Medical Center Rostock, Rostock, Germany

Aim of the Study: To analyze growth and development (weight and length) in children with total colonic aganglionosis (TCA) at defined time points during routine pediatric milestone checkups. Growth percentiles were assessed across subgroups, including: initial stoma phase, primary pull-through, redo pull-through, and persistent stoma.

Case Description: Cross-sectional study including 49 patients with TCA. Anthropometric data (weight and length) were collected at nine standardized time points during routine pediatric checkups ("U-Untersuchungen", birth to 5 years of age) via a parent-reported questionnaire, between March and June 2025. Measurements were analyzed in reference to the KiGGS study population (German Health Interview and Examination Survey for Children and Adolescents), using percentile ranks and Z-scores.

Conclusion: Mean Z-scores for weight and length were negative at all time points. Weight was significantly lower than reference values at all checkups ($p < 0.05$), while length showed significant deviation only at U8 and U9 (age 4 and 5 years). Longitudinal analysis revealed that weight remained consistently below average throughout the observation period. The next step is to match with episodes of Hirschsprung-associated Enteritis (HAEC). Length demonstrated a significant negative trend over time. No significant differences in weight or length were observed between the various treatment subgroups.

6. A Rare Case of Hirschsprung's Disease Followed by Rectovaginal (Ano-Vestibular) Fistula with Consecutive Sideropenic Anemia in 2-Year-Old Female Child

Authors: Risto Simeonov^{1,2} Kamelija Simeonova³, Martin Angjelov³, Vladimir Avramovski⁴, Biljana Choneska-Jovanova^{5,2}

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Aim: Hirschsprung's disease represents a neurocristopathy, caused by defective migration, proliferation, differentiation and survival of neural crest cells, leading to gut aganglionosis. We present a rare case of Hirschsprung's disease following rectovaginal fistula in 2-year-old female child.

Case report: A 2-year-old female child was referred the Department of Pediatric surgery, via pediatrician with chief medical concerns of constipation, general weakness and abdominal tenderness.. An irrigography detected ano-vestibular fistula altogether with incontinentio alvi. In addition, during the procedure the colon was emptying itself several times. An indication for operative treatment was suggested, so child undergo surgical treatment. PSARP anoplasty was done altogether with fistulectomy and sigmoidostomy and the operative material was sent for HP verification. The histopathology revealed Hirschsprung's disease. After second operation, the child again came to our department with loss of appetite, hemorrhage and paleness. Lab tests were ordinated and sideropenic anaemia was diagnosed and then adequate treated. The patient, also undergo for postoperative EMG of the anal sphincter with normal results.

Conclusions: Still the standard treatment of Hirschsprung's disease is mainly surgical resection of the aganglionic part of the intestine, however, as many as 30-50% of patients experience persisting symptoms.

Keywords: *Hirschsprung's disease, recto-vaginal fistula, child, anaemia, management*

7. Case series ReKiSo– Transabdominal rectal Sonography in Pediatric Colorectal Disease: Interrater Reliability of bedside assessment of faecal load

Authors: Naemi Kurzweil, Stefanie Märzheuser, Judith Lindert

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Assessment of fecal load is an essential component of long-term follow-up in children with colorectal conditions. While the use of ultrasound in this context is under debate, it offers a potential non-radiative alternative to imaging techniques such as X-ray. This study evaluates the interrater reliability of transabdominalrectal ultrasound measurements in pediatric patients with Hirschsprung's disease, Anorectal Malformation, Chronic Constipation, and healthy controls.

This investigation is a substudy of the ReKiSo study. Between October 2024 and June 2025, a total of 220 ultrasound measurements were independently obtained by two examiners. A Toshiba Aplio 300 ultrasound machine equipped with a curved array probe was used. The transducer was positioned just proximal to the pubic symphysis and angled 15 degrees caudally in the transverse plane.

Measurements were performed independently by two raters: a pediatric surgery consultant and a medical student. Interrater reliability was assessed using the Intraclass Correlation Coefficient (ICC), which yielded a value of 0.954. This reflects excellent agreement between observers and supports the use of transrectal ultrasound as a reliable diagnostic tool in pediatric colorectal assessment. Despite concerns about user dependency, these findings suggest that with appropriate training, ultrasound may serve as a consistent and non-invasive alternative for evaluating fecal load.

8. Timing of Colectomy and Surgical Outcomes in Pediatric Patients with Ulcerative Colitis

Authors: Andreina Giron, MD^a; Zoe Flyer, DO^a; John Schomberg, PhD, MPH^a; Zhuo Chen, PhD^a; Donald Shaul, MD^a; Peter T. Yu, MD, MPH^{a,b}; Hira Ahmad, MD^{a,b}.

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Background: Ulcerative colitis (UC) is a chronic inflammatory disease of the colon that often presents more severely in pediatric patients than in adults, leading to an increased need for surgical intervention. This study examines whether the timing of colectomy influences clinical outcomes in children with UC, hypothesizing that earlier surgery may improve outcomes.

Methods: A retrospective analysis was performed using the Pediatric Health Information System (PHIS) database from 2004–2022. The study included 1,147 patients aged ≤18 years with UC who underwent colectomy. Patients were stratified by the time from diagnosis to surgery into four quartiles: <1 month (A), 1–6 months (B), 6–24 months (C), and >24 months (D).

Results: Patients in group A were youngest (median age 13.8) and had the highest disease severity (47.5%). They also had the lowest rates of biologic use (32%) and highest return to the OR (35.8%), length of stay (9 days), and mortality (11.7%) (all $p < 0.0001$). Elective surgeries were most frequent in group D (25.2%) and rare in group A (2.5%).

Conclusions: Early colectomy within one month of diagnosis is associated with worse clinical outcomes, likely reflecting higher baseline disease severity. Optimal timing of surgery warrants further investigation.

Table 1. Demographics, Treatment Characteristics, and Outcomes of Timing of Colectomy in Pediatric Patients with Ulcerative Colitis using PHIS years 2005-2022.

Characteristics	Group A (n=236) <1 month	Group B (n=324) 1-6 months	Group C (n=337) 6-24 months	Group D (n=250) >24 months	p-value
Median Age in years	13.80	15.0	15.29	16.72	<0.0001
Disease Severity*	112 (47.46%)	148 (45.68%)	87 (25.82%)	53 (21.2%)	<0.0001
Biologics used	76 (32.20%)	243 (75.0%)	244 (72.40%)	177 (70.8%)	<0.0001
Steroids used	207 (84.71%)	310 (95.68%)	331 (98.22%)	245 (98.0%)	<0.0001
Elective Surgery	6 (2.54%)	43 (13.27%)	84 (24.93%)	63 (25.2%)	<0.0001
Median LOS	9	8	3	3	<0.0001
Return to OR (30 days)	62 (26.27%)	116 (35.80%)	98 (29.08%)	47 (18.8%)	<0.0001
Complications**	98 (41.53%)	203 (62.65%)	173 (51.34%)	119 (47.6%)	NA
High mortality risk*	17 (7.20%)	38 (11.73%)	8 (2.37%)	8 (3.2%)	<0.0001

* Disease severity and high mortality risk were classified using the All-Patient Refined Diagnosis-Related Groups (APR-DRG) algorithm, as defined by PHIS.

**Complications: Anastomotic leak, stoma problems, bleeding, DVT, SSI, CAUTI, VAP, PLI, CLABSI.

9. Robotic-Assisted Ileocectomy in Pediatric Crohn's Disease: A Multidisciplinary Approach to Enhanced Recovery and Surgical Outcomes

Authors: Zoe Flyer, DO¹; Andreina Giron, MD^{1,2}; Ashley Bone, CPNP¹, Andreina Urrutia Gutierrez BSN¹, Donald Shaul MD¹, Hira Ahmad, MD^{1,2}.

1. Children's Hospital of Orange County Division of Pediatric Surgery, Orange, CA, USA.
2. University of California Irvine Department of Surgery, Orange, CA, USA.

Background: Inflammatory bowel disease (IBD) frequently affects pediatric patients. In cases of Crohn's disease requiring surgery, ileocectomy is performed. Traditional open approach is associated with increased postoperative pain and larger incisions. To enhance recovery, our institution adopted a minimally invasive approach, utilizing robotic-assisted laparoscopic ileocectomy.

Case Description: A multidisciplinary protocol initiated six weeks preoperatively includes exercise regimens and nutrition optimization. Biologic medications are discontinued three weeks preoperatively and resumed two weeks postoperatively. An Enhanced Recovery After Surgery (ERAS) protocol is implemented to minimize narcotics. A minimally invasive, multiport robotic-assisted laparoscopic approach is employed. Ileocectomy is performed with precise robotic control, transecting the terminal ileum and cecum using an endoscopic stapler. Intracorporeal anastomosis is performed using a stapled, functional end-to-end technique. The enterotomy is closed with barbed running suture for a tension-free, airtight closure. Hemostasis is confirmed, and the specimen is retrieved with a protective bag through an extended trocar site.

Conclusions: Robotic-assisted ileocectomy is safe and effective in Crohn's pediatric patients, is associated with reduced length of stay, and a lower risk of postoperative complications. When integrated with a multidisciplinary, nutrition and exercise-focused ERAS protocol, robotic-assisted ileocectomy enhances postoperative recovery and optimizes surgical outcomes.

Friday 24 October

15:45-16:30 Session 10 – Abstracts – Case presentations

Moderators Stuart Hosie and Pär-Johan Svensson

ARM

1. Use of a 3-D Reconstruction Model for Surgical Planning in Cloacal Malformation: Initial Single Center Experience, Ramirez Calazans Ana, Murcia Pascual Francisco Javier, Parente Hernandez Alberto, Fanjul Gomez Maria, Paredes Esteban Rosa Maria. Reina Sofia University Hospital, Cordoba, Spain.
2. Early Experience with Real-Time MRI-Guided Laparoscopic Anorectal Malformation Repair at a Community-Based Hospital Setting- Marcus Jarboe MD, Bryan Sack MD, Maria Kenner MD, Matthew Ralls MD
3. The Importance Of Preserving the Marginal Artery of Drummond in Redo-Surgery of Anorectal Malformation: A Video Presentation- Gül Özyüksel, Emre Divarçı, İzmir University of Economics, Faculty of Medicine, Medical Point Hospital, Department of Pediatric Surgery, İzmir, Türkiye
4. Parental Attitudes to Neoanus Dilatations Post-Reconstruction in Anorectal Malformations (Panda) Study- Thakkar H, Haffenden V, Yardley S
5. Diversion Colitis of the Bowel Neovagina and Development of Inflammatory Bowel Disease: A Case Series, Review of the Literature, and Proposed Surveillance Regimen- Taryn Wassmer, MD1, Kristin Hare, MD1, Deborah Winograd, DO1, Jason Frischer, MD2, Lesley Breech, MD1,3 1. Cincinnati Children's Hospital Medical Center, Department of Pediatric Surgery, Division of Pediatric and Adolescent Gynecology, Cincinnati, Ohio 2. Cincinnati Children's Hospital Medical Center, Department of Pediatric Surgery, Cincinnati, Ohio 3. University of Cincinnati College of Medicine, Department of Obstetrics and Gynecology, Cincinnati, OH
6. Duplicated Colon With Rectovaginal Fistula: Multimodal Diagnosis And Staged Surgical Management In A Young Child Authors: Andreina Giron, MD Ms1; Zoe Flyer, DO1, Don Shaul, MD1; Hira Ahmad, MD1,2. 1. Children's Hospital Of Orange County Division Of Pediatric Surgery, Orange, Ca, Usa. 2. University Of California Irvine Department Of Surgery, Orange, Ca, Usa.
7. Platelet-Rich Plasma Injection for Non-Surgical Closure of Congenital Rectovaginal Fistula: A Case Report- Zoe Flyer, DO1; Andreina Giron, MD1,2; Ashley Bone, CPNP1, Andreina Urrutia Gutierrez BSN1, Donald Shaul MD1, Hira Ahmad, MD1,2. 1. Children's Hospital of Orange County Division of Pediatric Surgery, Orange, CA, USA. 2. University of California Irvine Department of Surgery, Orange, CA, USA.

1. Use of a 3-D Reconstruction Model for Surgical Planning in Cloacal Malformation: Initial Single Center Experience

Authors: Ramirez Calazans Ana, Murcia Pascual Francisco Javier, Parente Hernandez Alberto, Fanjul Gomez Maria, Paredes Esteban Rosa Maria.

Reina Sofia University Hospital, Cordoba, Spain.

Introduction: Cloaca represents the most complex anorectal malformations in girls. Technological advances have allowed a more accurate description of anatomy, improving presurgical planning and postoperative outcomes. We describe the use of 3D-cloacogram reconstruction in the surgical planning of two cases at our center.

Clinical Case: A cloacagram was performed using CT and 3D reconstruction. Length of the urethra (LU), length of the common channel (LCC), distance from rectal fistula to perineum (DRP) and presence of other structural anomalies were described.

Patient 1: 18 months. LU 1.8 cm, LCC 2.6 cm and DRP 3 cm. Right ectopic ureter to bladder neck.

Patient 2: 6 months. LU 1 cm, LCC 3.5 cm and DRP 4 cm. Left multicystic kidney.

Two hemivaginas, two hemiuteri and lumbar vertebrae fusion defect were described in both patients

Total urogenital mobilization and urogenital separation with abdominal approach without vaginal replacement were the surgical techniques of choice in each case.

Conclusion: Preoperative planning in surgical repair of cloaca is essential. Performing a cloacagram with 3D reconstruction allowed accurate prediction of the cloacal anatomy and selection of the optimal surgical technique.

2. Early experience with real-time MRI-guided laparoscopic anorectal malformation repair at a community-based hospital setting

Authors: Marcus Jarboe MD, Bryan Sack MD, Maria Kenner MD, Matthew Ralls MD

Aim: Over 70% of school aged children who undergo anorectal malformation (ARM) repair experiencing constipation and/or fecal incontinence requiring enemas. MRI-guided needle placement for laparoscopic ARM repair suggests improved outcomes in a single institution study. A multicenter trial is needed to confirm improved outcomes, but critics question if the procedure is transferable from a tertiary center. This study reports the early experience and successful performance of the MRI-guided laparoscopic ARM repair in a community pediatric hospital environment.

Case Description: Variability in scanners required unique MRI sequences to perform the procedure. Different bore size and MRI coils necessitated custom MRI compatible positioning devices. Given the logistical complexity of patient transport from the OR to diagnostic MRI, a surgical 'roadmap' was created to coordinate providers across multiple disciplines.

Patient transfer from anesthesia induction room to MRI suite to OR were successful in each case. Sequence modification of 3D-DESS sequence and Trufi based real-time sequence produced good image quality at ~3fps. After MRI guided needle placement, patients underwent fistula ligation and pull-through of the neoanus incorporating the puborectalis and the center of the external sphincter complex.

Conclusions: Real-time MRI guided laparoscopic ARM repair can be successfully performed in a community pediatric hospital environment.

3. The Importance of Preserving the Marginal Artery of Drummond in Redo-surgery of Anorectal Malformation: A Video Presentation

Authors: Gül Özyüksel, Emre Divarçı

İzmir University of Economics, Faculty of Medicine, Medical Point Hospital, Department of Pediatric Surgery, İzmir, Türkiye

Aim: In male patients with the high-type anorectal malformations, distal colonic perfusion may be compromised due to high-tension anorectal anastomosis. The decision to sacrifice the left colic artery can be a significant concern for pediatric surgeons. This video highlights the importance of preserving the marginal artery of Drummond during the Redo-surgery for anorectal malformations.

Case Description: An 8-year-old boy previously operated for anorectal malformation with a prostatic fistula presented with fecal incontinence. Preoperative and postoperative images are included in the video. Examination under anesthesia revealed cranial migration of the anal mucosa by 7–8 cm and severe stenosis, allowing only an 8 Fr Hegar dilatator. A contrast study showed a 3–4 cm fibrotic segment above the anal opening. Laparoscopic revision surgery was performed. The marginal artery of Drummond was preserved during dissection, and the sigmoid and descending colon were mobilized. As adequate length was not achieved, the left colic artery was ligated after confirming perfusion via marginal vessels. The colon was pulled through and anoplasty was performed.

Conclusion: Preservation of the marginal artery of Drummond supports distal colon perfusion and reduces the risk of postoperative anal stenosis due to tension.

4. Parental Attitudes to Neoanus Dilatations post-reconstruction in Anorectal Malformations (PANDA) Study

Authors: Thakkar H, Haffenden V, Yardley S

Aim and Methods: This qualitative study explored parents' experiences of performing routine neoanus dilatations after anorectal malformation surgery, a practice some surgeons recommend despite equivocal evidence of clinical benefit. Our goal was to guide best practice and support future research. After ethical approval, five parents joined a focus group, and 13 families participated in semi-structured interviews. Reflexive thematic analysis of transcripts continued until theoretical saturation was reached.

Description of Results: Four main themes emerged: (1) parents understood the medical need for dilatations; (2) the process caused parental distress, anxiety, fear, and guilt; (3) infants exhibited traumatic responses, including anticipatory stress; (4) parents reported strain in their relationships, often due to inequalities in responsibilities to perform the task. Whilst all parents recognised the procedure's importance, emotional and relational challenges were consistently reported. Minor themes included a sense of reward, the influence of co-morbidities, and cultural factors affecting the experience.

Conclusions: Despite accepting the procedure's importance, parents often struggled emotionally and relationally. Given the uncertain clinical benefits and significant social costs, routine parent-led neoanus dilatations should be reconsidered. Further research must weigh both medical outcomes and the broader impact on family dynamics.

5. Diversion Colitis of the Bowel Neovagina and Development of Inflammatory Bowel Disease: A Case Series, Review of the Literature, and Proposed Surveillance Regimen

Authors: Taryn Wassmer, MD¹, Kristin Hare, MD¹, Deborah Winograd, DO¹, Jason Frischer, MD², Lesley Breech, MD^{1,3}

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3. University of Cincinnati College of Medicine, Department of Obstetrics and Gynecology, Cincinnati, OH

Presenting Author: Lesley Breech, MD

Aim: Inflammation of the bowel neovagina results in neovaginal colitis, a form of diversion colitis, which may present with pain or bleeding but is commonly asymptomatic. This can incite inflammatory bowel disease (IBD) in the in-stream colon. We present four cases of neovaginal colitis with development of IBD and a review of the literature. We propose a surveillance strategy developed by our multidisciplinary team with the aim of earlier detection and reduced complications of neovaginal colitis.

Case Descriptions: Two of our four cases developed very early-onset IBD (under age 5). Three have ongoing complex medical management, and one required complete excision of the neovagina. Of the 24 cases of IBD and neovaginal colitis in the literature, 14 achieved symptomatic remission with medical management. Five underwent repeat neovaginoscopy, of whom three achieved biopsy-proven remission. Six required complete or partial excision of the bowel neovagina.

Conclusions: The presence of neovaginal colitis does not correlate with patient-reported symptoms, is a risk for development of IBD, and carries an unclear risk of future malignancy. Given the current absence of standard guidelines for surveillance and the clinical importance of histologically active disease, we propose a strategy incorporating surveillance neovaginoscopy *with empiric biopsy* to prevent adverse outcomes of neovaginal colitis.

6. Duplicated Colon with Rectovaginal Fistula: Multimodal Diagnosis and Staged Surgical Management in a Young Child

Authors: Andreina Giron, MD MS¹; Zoe Flyer, DO¹, Don Shaul, MD¹; Hira Ahmad, MD^{1,2}.

1. Children's Hospital of Orange County Division of Pediatric Surgery, Orange, CA, USA.
2. University of California Irvine Department of Surgery, Orange, CA, USA.

Aim: To describe the diagnosis and surgical management of a rare case of duplicated colon with rectovaginal fistula in a young child.

Case Description: A 2-year-old female with chronic constipation, rectal prolapse, and passage of stool per vagina was referred for evaluation. Examination under anesthesia with vaginoscopy, cystoscopy, and contrast enema revealed a duplicated colon with a rectovaginal fistula. Outpatient fluoroscopic enema confirmed the duplication and fistulous connection. She underwent laparoscopic division of the colovaginal fistula, resection of the duplicated rectum, Swenson pull-through of the sigmoid colon, creation of the common channel of the duplicated pull-through and loop ileostomy creation. Pathology confirmed benign colon with no inflammation or neoplasia. Postoperative recovery was uneventful. After ileostomy takedown, exam under anesthesia, proctoscopy, vaginoscopy, and incidental Meckel's diverticulum resection were performed. Final pathology showed no malignancy. At follow-up, the patient was stooling 2–3 times daily without assistance, tolerating a regular diet, and had no recurrence of vaginal stooling. The ostomy site was well-healed, and exam revealed a normal anus. The family was counseled on long-term surveillance for constipation and potential fistula recurrence.

Conclusions: Colonic duplication with rectovaginal fistula is a rare anomaly. Multimodal evaluation and staged repair can yield excellent functional outcomes.

7. Platelet-Rich Plasma Injection for Non-Surgical Closure of Congenital Rectovaginal Fistula: A Case Report

Authors: Zoe Flyer, DO¹; Andreina Giron, MD^{1,2}; Ashley Bone, CPNP¹, Andreina Urrutia Gutierrez BSN¹, Donald Shaul MD¹, Hira Ahmad, MD^{1,2}.

1. Children's Hospital of Orange County Division of Pediatric Surgery, Orange, CA, USA.
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Background: Congenital rectovaginal fistulas in pediatric patients are challenging to manage, with traditional treatment often involving surgery. Platelet-rich plasma (PRP) injection is emerging as a minimally invasive alternative, leveraging autologous growth factors to promote tissue healing and fistula closure.

Case Description: A 9-month-old female with VACTERL association and a late-presenting congenital rectovaginal fistula was treated with local PRP injection. She presented with a labial abscess and stool discharge from labia which prompted incision and drainage of the abscess and identification of H-type congenital rectovaginal fistula and subsequent seton placement. No surgical dissection, excision, or ligation of the fistula was performed. Autologous PRP was prepared from the patient's blood and injected directly into the fistula tract under anesthesia. The procedure was well-tolerated, and the patient was discharged without complications.

Conclusions: PRP injection alone is a safe, minimally invasive option for the management of congenital rectovaginal fistula in pediatric patients. This approach may augment autologous healing and offers a potential alternative to surgery. Long-term follow-up is needed to assess sustained closure and compare outcomes with traditional surgical methods.