

6. Fibrin Glue Repair of a Traumatic Rectovaginal Fistula in a Pediatric Patient

Gregory Vurture, MD, Victoriya Staab, MD, Mark Kayton, MD, Heather Appelbaum, MD

Jersey Shore University Medical Center

Background: Rectovaginal fistulas (RVFs) in pediatrics are often secondary to congenital anorectal malformations. Acquired RVFs are especially uncommon in this population. There is a paucity of data in the literature regarding the optimal treatment for acquired RVF. Here, we report an atypical presentation of a RVF in a developmentally delayed child that was repaired with fibrin glue.

Case: A 7 year old presented to the ER with her mother for sudden onset acute right hip pain. She had a history of postnatal meningitis with multiple cerebral infarctions, seizure disorder, spastic quadriplegia and central hypotonia with global developmental delay. A CT scan of the abdomen and pelvis demonstrated a hairpin protruding from the proximal vagina into the rectum. Pediatric gynecology and pediatric surgery teams were consulted. The findings were discussed with the state's child protection system and the patient's mother. The findings were consistent with accidental penetration and allegations of abuse were dismissed. The patient underwent an examination under anesthesia (EUA) and vaginotomy. The hairpin was identified in the distal posterior vaginal mucosa penetrating through the rectovaginal space, and perforating the anterior wall of the rectum into the lumen. The hairpin was removed and stool was noted on the prong tips. An anorectal speculum examination confirmed that the posterior rectal wall was intact and without defect. Vaginotomy revealed a 2-3 mm defect at the 5 o'clock position of the distal vaginal mucosa, probe-patent to the rectum. Inspection of the remainder of the vagina was otherwise unremarkable. A fibrin sealant was inserted into the tract using a 14 gauge angiocatheter. A suitable fibrin plug was created in the tract. The vaginal mucosa was imbricated over the plug in an interrupted fashion using 5-0 vicryl suture. Hemostasis was achieved. The procedure and postoperative course were overall uncomplicated. She was discharged on hospital day 2. An EUA was completed by the original surgical team after one year. Direct visualization with a 9.5 French Cystourethroscope demonstrated no defect of the posterior vaginal wall. A Hegar dilator was placed in the rectum, directed anterior and caudal, and further demonstrated lack of a vaginal mucosal defect.

Comments: This is the first report of RVF repair with fibrin glue in a pediatric patient. Fibrin glue therapy may be a minimally invasive and safe alternative to surgical excision for the repair of small RVF in pediatric patients. Further research is needed to determine the size of defect amenable to a minimally invasive approach using fibrin glue and the long term outcomes of this therapy in this population.

Supporting Figures or Tables

<https://www.abstractscorecard.com/uploads/Tasks/upload/19245/RGXGDRUQ-1355994-1-ANY.docx>

<https://www.abstractscorecard.com/uploads/Tasks/upload/19245/RGXGDRUQ-1355994-2-ANY.docx>

7. Intrauterine device practices amongst adolescent patients

Kristina Arion, MD¹, Tara D. Justice, MSc, MD, FRCSC², Sarah McQuillan, MD, FRCSC²

¹Dalhousie University

²University of Calgary

Background: Adolescent pregnancy is a worldwide public health issue, and the intrauterine device (IUD) has been shown to be a safe and highly effective method of long-acting reversible contraception (LARC) in this group. Patient concerns regarding IUDs are common, which should be ad-

ressed during routine office visits. Recently, both Pediatric and Gynecologic societies have recommended the IUD as a first line contraceptive for adolescents given their safety and efficacy. We are hoping to understand current IUD practices amongst providers, elucidate barriers to IUD insertion, and explore whether there have been any changes in IUD insertion patterns since the advent of the COVID-19 pandemic, which has increased telehealth and reduced operating room (OR) availability.

Methods: Survey was disseminated to NASPAG (North American Society for Pediatric and Adolescent Gynecologists) members via the listserv on two separate occasions. Consent was obtained upon completion of the survey. Results from the survey are anonymous. Results were tabulated with descriptive statistics. Ethics approval was obtained (REB22-0269).

Results: There were 55 respondents, with the majority being Pediatric and Adolescent Gynecologists (71%) from North America (93%). As per providers, adolescents most frequently seek out the IUD for contraception (45%) and menstrual management (42%). Providers felt that the most common barrier to the IUD was misconceptions/myths (67%), as well as pain with insertion (64%). Most practitioners had no change in their IUD prescribing patterns since the start of the pandemic (62%), while some performed more office insertions (11%) and some reduced their IUD practice because of less operative time (15%) and less in-person appointments. Although many physicians perform office insertions, many found that a Procedural Sedation Center facilitated wait times (38%) or felt that such a center would be helpful (33%). Cases being done in the OR were often patients with disabilities/developmental delay (95%) or anxiety (75%).

Conclusions: Our survey demonstrated that there are still some misconceptions surrounding the IUD. Education on contraception, specifically LARCs, is pivotal in decreasing adolescent pregnancy rates, reducing barriers to IUD use, and improving the attitude of adolescents toward the IUD. Pain with insertion is another limiting factor and a Procedural Sedation Center may be helpful in managing pain expectations and increasing acceptance of the IUD. Although there was no significant change in IUD practices during COVID, a decrease in operating room availability and increase in telehealth may impede IUD prescribing, especially in patients with developmental delay or disabilities who may require insertion in the OR.

8. A quality improvement initiative: development and implementation of a menstrual suppression patient and family decision aid

Valerie Bloomfield, Beverley Osei, Heather Millar, Anjali Aggarwal

Hospital for Sick Children

Background: Menstrual suppression allows for the management of common symptoms associated with menses. For patients with developmental and/or physical disabilities, several factors must be considered such as the patient's independence in activities of daily living, symptoms, comorbidities, polypharmacy, and ability to participate in informed consent. Given the choice for menstrual suppression is often value driven, Pediatric and Adolescent Gynaecologists are obligated to provide balanced, comprehensive counselling. Using a quality improvement approach, we aim to develop and evaluate the effectiveness of a decision aid for menstrual suppression in providing education, assisting in decision-making and increasing patient and family satisfaction.

Methods: This is a project in progress. We used the International Patient Decision Aid Standards to develop and evaluate the patient decision aid. A paper prototype was drafted after review and synthesis of the literature regarding menstrual suppression. Next, the tool was critically reviewed by study authors for usability and actionability using the Patient Education Material Assessment Tool (PEMAT). Feedback was elicited from a multi-disciplinary team to review content and flow using a 5-point Likert Scale (1 = strongly disagree to 5 = strongly agree). With each iteration of feedback, the tool was revised. Next steps involve sharing with families and collecting feedback about usefulness and satisfaction. Balance measures,

including time spent reviewing the tool by families and care providers, will be assessed.

Results: To date, healthcare providers and ethicists have rated the usability and actionability of our tool highly according to the PEMAT. Care providers agreed the tool will be helpful for families (4.2/5), is easy to understand (4/5), accurately represents care (4/5) and provides valuable information (4.2/5). Care providers commented that the tool provides a comprehensive, non-judgmental overview of menstrual suppression. Suggestions for improvement include increasing the interactivity of the tool, generating a summary of results for families, and improving the flow of the online tool.

Conclusions: We demonstrate the development of a menstrual suppression decision aid, using a quality improvement process. Our experience highlights the feasibility of creating decision aids in the field of pediatric and adolescent gynaecology.

9. Symptomatic Infected Fluid Collection Complicating a Gravid Uterus Didelphys

Joshua Morris¹, Jasmine Eliwas², Molly Houser², Claudette Shephard²

¹ Eastern Virginia Medical School

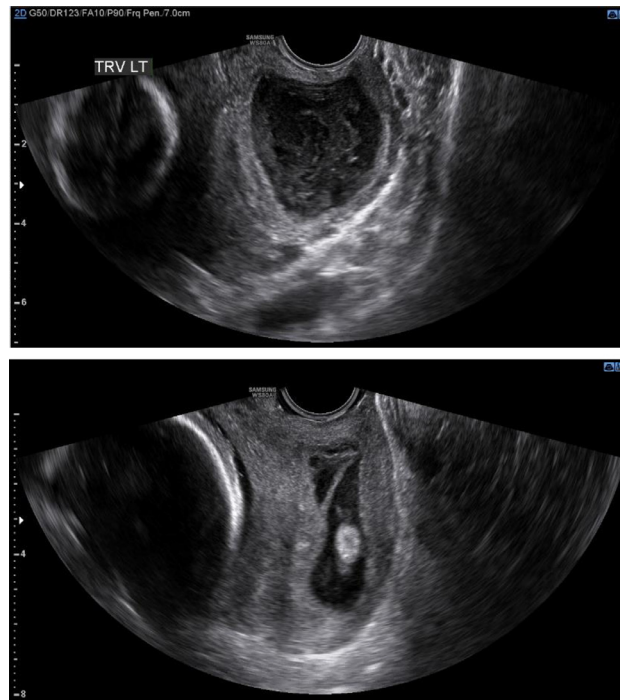
² University of Tennessee Health Sciences Center

Background: Congenital müllerian anomalies (CMA) are common, affecting approximately 5% of the population. Sonographic as well as MRI evaluation of CMA may help delineate anomaly classification, however a large gravid uterus may obfuscate ability to define these during pregnancy. This report illustrates an interesting case of a CMA diagnosis needed to evaluate and manage a non-obstetric complication during the second trimester of pregnancy.

Case: A 19 year old G1 with no significant gynecologic history presented for a fetal dating and anatomy ultrasound at 16 weeks and was notable for suspected didelphys uterus. A singleton pregnancy was noted in right uterus whereas the left uterus was empty with a thickened endometrium and hematocolpos suggestive of a longitudinal vaginal septum. On follow up ultrasound, a growing, large complex fluid collection measuring 6.76 × 3.31 × 4.26 cm was noted. At 25 weeks she presented to an OB-ED with heavy vaginal bleeding and significant purulent discharge and was admitted for treatment of suspected PID in the non-gravid uterus in the setting of leukocytosis (16,200) and fundal tenderness. On vaginal and rectal exam, a second cervix was unable to be identified and no vaginal bulge noted on palpation. A pelvic MRI was obtained to rule out an obstructed hemi-vagina and unilateral renal anomaly (OHVIRA), but was instead suggestive of an occluded hemi-vagina. The patient was readmitted 72 hours later due to preterm contractions which resolved, however purulent discharge continued. At that time, patient underwent exam under anesthesia, and with ultrasound guidance, a uterine sound was advanced into a fistula tract and a word catheter was placed through the fistula tract into the left hemi-vagina. Once the purulent discharge was drained, the left cervix was palpated 3 cm anterior to the right cervix, but not visualized. At 27 weeks there was minimal residual drainage and the catheter was retracting into mucosa as uterus was growing. Worried that the catheter may get lost or be a site for ascending infection it was removed. She was subsequently diagnosed with gestational hypertension at 37 weeks and she underwent an induction of labor.

Comments: Ascertaining the proper anatomical CMA was integral to resolving the infection of the non-gravid müllerian structures and provide appropriate counseling on risks in this and future pregnancies. Uterine anomalies are difficult to detect during pregnancy, and this report illustrates a fascinating multi-subspecialty approach including MFM, Pediatric and Adolescent Gynecology, Infectious Disease, and Interventional Radiology as well as a multi-imaging modality approach to provide appropriate evaluation and management.

Supporting Figures or Tables



10. A Petrified Intrauterine Device: Another Consideration for a Vaginal Foreign Body

Lillian Boettcher, MD¹, Katherine Hayes, MD²

¹ University of Utah

² University of Utah & Intermountain Primary Children's Hospital

Background: This case describes a levonorgestrel intrauterine device (IUD) found to be expelled and retained in the vagina encased in a thick, calcified rind. This case demonstrates that an IUD may be retained in a vaginal foreign body in a patient with decreased mobility and may present with an unconventional appearance. There are several case reports in the literature describing IUDs migrating into the bladder and forming intravesical calculi; there are no case reports describing a similar process of petrification in the uterus or vagina.

Case: The patient is a 12-year-old, medically complex female with global developmental delay, quadriplegic cerebral palsy and epilepsy secondary to congenital cytomegalovirus infection. She had menarche at age 9. A 52 mg levonorgestrel IUD was placed seven months later for menstrual suppression, resulting in significantly lighter menstrual bleeding. After about one year, the patient experienced a return of heavier menstrual bleeding, which persisted for a year prior to presentation. She had a renal ultrasound completed for unrelated complaints that noted a vaginal foreign body, concerning for her IUD. Her exam revealed a rock-like foreign body in the vagina, but no IUD. The object could not be removed in the clinic. She then had an exam under anesthesia (EUA) at which time the foreign body was easily removed. The T-shaped object was encased in a malodorous, hard, brown cast. Breaking the cast revealed the patient's IUD. Another 52 mg levonorgestrel IUD was then successfully placed resulting in excellent menstrual suppression.

Comments: In this non-mobile patient, the differential diagnosis included calcified stool or decidual cast, her IUD, or another foreign body. In the office, the foreign body was not clearly identifiable and due to the size could not easily be removed. The EUA demonstrated an encased IUD. This patient's IUD was possibly expelled and then sat in the vagina where layers of surface deposition accumulated and created a stone. We also considered that the IUD was expelled in toto within a decidual cast. The expulsion rate of IUDs in adolescents is reported to be 8.0%. Identifying