22. Adnexal Torsion and Syndrome of Inappropriate Antidiuretic Hormone – Coincidental or Causal? A Case Report of an Adolescent with Torsion Presenting with Severe Hyponatremia

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Background: Adnexal torsion is the sixth most common pediatric surgical emergency, and one that requires high suspicion and prompt surgical intervention in order to preserve adnexal function. Patients presenting with one or more additional acute medical concerns during an episode of torsion must be managed carefully and effectively to ensure both safe perioperative care and expeditious surgical management.
Case: In this report we review a case of adnexal torsion in a seventeen-year-old female who was found incidentally to have severe hyponatremia, with serum sodium concentration 117 mEq/L. Further workup was initiated which demonstrated low serum osmolality and high urine osmolality, consistent with syndrome of inappropriate antidiuretic hormone (SIADH). Per our review of the literature, this represents the first case report of SIADH in the setting of adnexal torsion. Potential causes of and factors contributing to her hyponatremia were considered including SSRI use, pain, and possible relapse of prior anorexia nervosa. In this case, optimizing surgical management was uniquely challenging due to the need to balance preoperative normalization of sodium to minimize intraoperative risk with the necessity of urgent surgical detorsion to prevent lost or compromised fertility in a young patient. Although serum sodium improved with medical management, it only returned to normal range after the patient underwent surgery to de-torse her adnexa and relieve her pain.
Comments: Through this case we review the presentation, evaluation, and management of ovarian torsion, a common but easily missed diagnosis in pediatric and adolescent patients with abdominal pain. Additionally, we discuss SIADH and its pathophysiology, symptoms, diagnosis, and potential sequelae. Further discussion includes the role of pain and surgery in SIADH, adnexal masses known to cause SIADH, medications commonly implicated in SIADH, and an overview of the types of hyponatremia commonly seen in patients with restrictive diets or anorexia nervosa. Although to our knowledge this represents the first reported case of SIADH in the setting of adnexal torsion, the linkage between pain afferents and SIADH has been documented, suggesting that patients with severe pain from torsion may be at risk for hyponatremia via this mechanism. As such, providers should be aware of the management of SIADH as well as potential perioperative risks. This case, along with our review of the literature, supports surgical intervention as frequently integral to definitive correction of hyponatremia in patients with adnexal masses resulting in SIADH.

Supporting Figures or Tables
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23. Transverse Vaginal Septa: A Survey of Current Provider Practices

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Background: Transverse vaginal septa (TVS) are rare congenital abnormalities of the vagina that are typically managed by experienced Pediatric & Adolescent Gynecologists (PAG). Debate often exists on the preoperative management, timing of surgery, surgical management, and postoperative care for these patients. Given the rarity of the condition, the published literature on the surgical management of TVS is scarce and poorly described, which is not ideal for a condition that carries high levels of surgical risk. This exploratory cross-sectional study served to add to the limited existing literature and create consensus among NASPAG providers on how to best care for these patients. We hypothesize that providers have varied preoperative and postoperative practices, but that most providers are delaying surgery until the patient is older and can fully participate in their care.
Methods: An electronic survey was distributed through REDCap to all members of the NASPAG listserv on two occasions. The survey consisted of up to 47 questions, with the number of questions for a given individual determined by their level of involvement in the care of patients with TVS. Questions explored the full breadth of care, including practices at the time of diagnosis, decision making regarding timing of surgery, use of menstrual suppression, and perioperative management. Ethics approval was obtained.
Results: Forty-three members of NASPAG responded to the survey. The majority were trained in PAG (90.6%) and felt comfortable with the surgical management of TVS (90.6%). There was heterogeneity with respect to whether surgeons would operate at the time of diagnosis, with 11.6% of respondents always operating, 20.9% never operating, and 66.4% operating in select circumstances. A variety of forms of menstrual suppression are used, with only 15.7% of respondents using a GnRH agonist despite it being one of the more effective methods of menstrual suppression. With respect to dilatation, 64% of providers consider pre-operative vaginal dilatation while 95% of providers consider using a post-operative vaginal stent or dilatation. Pre-operative antibiotics are not routine, with only 56.4% of surgeons using antibiotics at the time of surgery with cefazolin as the antibiotic of choice.
Conclusions: Despite the close-knit nature of the PAG community, there is remarkable heterogeneity in the management of patients with TVS. Our study highlighted the significant variation in the timing of surgery as well as the preoperative, intraoperative, and postoperative care. Further research into the influence of some of these factors on postoperative complications is paramount to improve the quality of care for patients with TVS and standardize practice amongst PAG providers.

24. Postpartum Diagnosis and Treatment of a Prolapsed Longitudinal Vaginal Septum in a Didelphys Uterus

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Background: Incomplete fusion or failure of canalization of the Mullerian ducts can yield a longitudinal vaginal septum (LVS). Mullerian duct anomalies occur with an incidence of 0.001- 10%. [3] [8] Clinically, these patients can present with dyspareunia, difficulty with tampon insertion, hygiene issues, dysmenorrhea, amenorrhea, hematometra, recurrent pregnancy loss, [8] infertility, primary amenorrhea, dystocia during vaginal delivery (protracted first stage of labor or arrest of dilation) [5], or as in the case of our patient, an asymptomatic incidental finding on imaging or clinical exam The purpose of this report is to discuss childbirth outcomes, trauma, and dyspareunia with longitudinal vaginal septum. This case is important because of its unique clinical presentation and the consideration to change management of LVS due to potential increased morbidity of maternal trauma and childbirth outcomes.
Case: A 25 year old G3P3003 presents with uterine didelphys, recently postpartum with dyspareunia due to a prolapsed vaginal septum. The patient is Tanner stage 5, with a BMI of 22 kg/m2 and is not currently sexually active. Diagnostic work up included, a transvaginal ultrasound which revealed unremarkable anatomy. Follow up MRI, reported an anteverted, septate uterus 6.1cm x 5.8cm x 2.8cm with a complete septum extending at least to the external cervical os. Adnexa were unremarkable and a 2.1cm x 1.4cm intramural fibroid was noted. Management of patient's condition was a surgical resection of the longitudinal septum. There were no postoperative complications and her postoperative appointment exam demonstrated granulation tissue at both the 7 and 12 O'clock position that