Conclusions: The SAMI curriculum offers a two-year structured, standardized approach to fellows' learning experiences that can be adapted based on in-training examinations and content outlines. Preliminary results highlight increased perceived knowledge. The 2-year curriculum cycle permits application regardless of training level and allows 3rd years to participate in curriculum assessment and teaching. SAMI may allow balanced and directed didactic and clinical learning to develop robust competency expected of ABP-certified adolescent medicine subspecialists.

121. Treatment of Catamenial Epilepsy with Norethindrone Acetate: A Case Report

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Background: Catamenial seizures are a well-described phenomenon that many patients with epilepsy face. Physicians treating these seizures may endure challenges, given the paucity of data available for hormonal management. We present the case of a patient with drug-resistant epilepsy secondary to Lennox-Gastaut Syndrome, with objective evidence of reduced seizures and blunted perimenstrual cycling of seizure frequency following initiation of oral norethindrone acetate.
Case: We present a 16-year-old female with Lennox-Gastaut Syndrome resulting in multiple seizure types (predominant head drop and absence types) who was referred to Gynecology for catamenial epilepsy. At the time of evaluation, she was three years post-menarche and menses were monthly, lasting 6 days with light to moderate flow. Her epilepsy had been refractory to treatment with numerous antiepileptic drugs (AEDs) and vagal nerve stimulation therapy, leading her to proceed with Responsive Neurostimulation (RNS). RNS is an implantable cranial neurostimulator that allows closed-loop recording and stimulation of seizure foci. Following RNS placement with depths to bilateral centromedian thalamic nuclei, the prior self-reported increase in absence seizures with menses aligned with objectively recorded increased seizure activity on RNS. Before hormonal therapy, the RNS captured substantial cycling of increased seizures, lasting between 5-7 days, recurring monthly. She then started daily oral norethindrone acetate after which RNS event trend data showed a sustained decrease in seizure events and variability (cycling) of events over ten months. She tolerated the medication without any side effects and endorsed improved quality of life with reduced seizure activity.
Comments: Catamenial epilepsy remains a complex condition to treat. In addition to variation in menstrual pattern, management requires consideration of an individual's AED regimen, alternative medical comorbidities, and subjective reporting of changes in seizure pattern. While previous studies have shown self-reported reductions in seizure activity following initiation of oral progestins, this case is the first of its kind to show an objective reduction in catamenial seizure activity following initiation of oral norethindrone acetate.

Figure 1: Patient trend of seizure activity over time, capturing pre-and-post treatment with norethindrone acetate. "Long episodes" refer to events captured on RNS that represent detected seizures. Each bar represents a single day of events, and each box height represents 100 such events. Following the initiation of norethindrone acetate (Nov 2023), fewer events are detected on RNS.

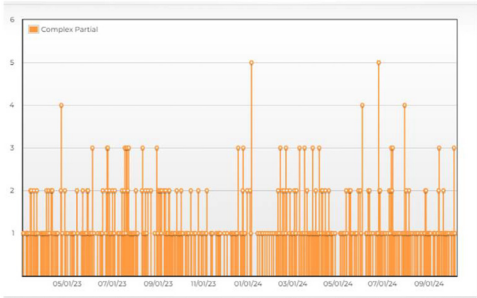

Figure 2: Patient seizure diary data of daily head drop seizure clusters. Each orange bar represents one day. Patient's best seizure control was noted between November 2023 and February 2024, when fewer days with >1 seizure were noted, and larger gaps in between seizure days were observed.

122. Treatment of congenital genital abnormalities in girls – our experience

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Background: Female genital tract abnormality incidence is circa 4-6.9%. They may present in puberty with severe dysmenorrhea, inflammation, pelvic pain due to obstruction of menstrual outflow.
Methods: Patient chart review of 247 girls with congenital anomalies undergoing surgery in 2000-2024
Results: Hymen atresia is quite common, diagnosis and treatment are straightforward (19.83% of cases). Distal vaginal agenesis – surgical complexity depends on aplastic area (20.24% of cases). Bicorporeal uterus with hemiobstructed vagina (OHVIRA) – U3C2V2- is frequent (37.24% of cases). We perform plastic of the obstructed vagina wall to provide unimpeded blood flow. Bicorporeal uterus may be accompanied by cervical atresia - U3C3V0, resulting in haematometra and haematocervix (17% of cases). Surgery creates an external opening of the cervical canal - a difficult task with high risk of stricture and inflammatory complications. In 71,43% of cases, done from the vagina. In 28,57% of cases, the uterus was removed with an atretic cervix on one side. The normal uterus and cervix remained intact. Hemi-uterus with non-communicative functional horn – U4aC0V0 - is rare (10.12% of cases), presenting with dysmenorrhea from menarche, requiring surgery. All girls underwent surgery - removal of rudimental horn with ipsilateral tube and ovary preservation via laparoscopy (88%) or laparotomy (12%). In 72% the rudimental horn was connected with the uterus by muscular bridge, in other cases – located on a wider basis. High risk of endometriosis due to retrograde menstruation. Cases of vaginal aplasia with functional uterus are rare, treatment tactics can be tricky. We start by ceasing menstruation and conservative colpoelongation, and then the creation of utero-vaginal anastomosis. If vaginal elongation is impracticable, we perform two-stage surgical treatment: 1- creation of a neo-vagina; after epithelization -2- creation of utero-vaginal anastomosis. Protector use prevents postoperative stenosis. Conservative colpoelongation firstly in cases of MRKH syndrome yields 60% efficacy. Treatment strategy selection and surgery are complex in girls with anorectal atresia, which may be accompanied by developmental defects of the spine, kidneys and the internal/external sex organs. All require a multi-disciplinary approach with a surgeon, urologist and gynecologist to properly identify, select and conduct surgical intervention.