Congenital virilization after two pregnancies with retained intra-uterine Mirena® device

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Introduction

• Mirena® intra-uterine device (IUD) is a progestin-analog-secreting device

• Pregnancy rate with the Mirena device = ~0.2% (Trussell et al. 2011, Contraception)

• When pregnancy occurs despite IUD, device removal is advised due to increased maternal pregnancy risks (Brahmi et al. 2012, Contraception)

• Fetal consequences of retained Mirena are unknown
Patient #1: AR

- Presented at 4mo
- 46,XX
- Term healthy pregnancy
- PMH: right MCDK
- Exam:
  - Urogenital sinus with fused labia
  - Normal sized clitoris
  - Long perineal body
  - Normal anus location
Patient #1: AR

- Presented at 4mo
- 46,XX
- Term healthy pregnancy
- PMH: none
- Exam:
  - Urogenital sinus with fused labia
  - Normal sized clitoris
  - Long perineal body
  - Normal anus location

Patient #2: AMC

- Presented at 4mo
- 46,XX
- Term healthy pregnancy
- PMH: right MCDK
- Exam:
  - Urogenital sinus with fused labia
  - Normal sized clitoris
  - Long perineal body
  - Normal anus location
Patient 2 exam
EUA, cystoscopy, vaginoscopy, genitogram

- Performed at 4-7 months
- Urogenital sinus
- Common channel length 1-1.5cm
- Normal urethra and bladder
- Normal vagina and cervix
- Normal cystogram and genitogram
Vaginoplasty

- Performed at 9mo for patient #1 and 2yr for patient #2
- Flap vaginoplasty
- Both patients discharged POD1
Follow up

• Both patients were doing well at short term follow up
Conclusion and discussion

• Two similar presentations of genital virilization associated with retained Mirena device during pregnancy
• Flap vaginoplasty has good short term results
• Consistent with reports of virilization associated with high dose progestin use during pregnancy
• Mechanism of action of progestin’s role during pregnancy remains unclear
• True incidence unclear. Longer follow up, larger series needed
Thank You