PEDIATRIC & ADOLESCENT GYNECOLOGY

Laura Tatpati, MD
UKSM-Wichita Dept of Obstetrics and Gynecology
NO DISCLOSURES
• Puberty
• Pediatric Examination
• Adolescent Adnexal Masses
PUBERTY

APGO Video
Transabdominal pelvic sonograms. A. Normal neonatal uterus. Midline longitudinal sonogram of the pelvis in this 3-day-old newborn demonstrates the uterus posterior to the bladder. Yellow arrows mark the fundus, isthmus, and cervix, respectively. The anteroposterior (AP) diameter of the cervix is greater than that of the fundus and creates a spade-shaped uterus. Due to the effect of maternal and placental hormones, a central echogenic endometrial cavity stripe is clearly visible. B. Normal prepubertal uterus. Midline longitudinal sonogram of the pelvis in this 3-year-old girl demonstrates the uterus posterior to the bladder. Yellow arrows mark the fundus, isthmus, and cervix, respectively. The uterus is homogeneously hypoechoic. The AP diameter of the cervix is equal to that of the fundus, and this gives the uterus a tubular shape. (Used with permission from Dr. Neil Fernandes.)

Source: Pediatric Gynecology, Williams Gynecology, 3e
Citation: Hoffman BL, Schorge JO, Bradshaw KD, Halvorson LM, Schaffer JI, Corton MM. Williams Gynecology, 3e; 2016 Available at: http://accessmedicine.mhmedical.com/content.aspx?bookid=1758&sectionid=118169397
Accessed: November 06, 2017

Copyright © 2017 McGraw-Hill Education. All rights reserved
Variation in oocyte number and hormone levels during prenatal and postnatal periods. (DHEA = dehydroepiandrosterone; FSH = follicle-stimulating hormone; hCG = human chorionic gonadotropin; LH = luteinizing hormone.) (Reproduced with permission from Fritz M, Speroff L: Clinical Gynecologic Endocrinology and Infertility, 8th ed. Baltimore: Lippincott Williams & Wilkins; 2011.)

Source: Pediatric Gynecology, Williams Gynecology, 3e
Citation: Hoffman BL, Schorge JO, Bradshaw KD, Halvorson LM, Schaffer JI, Corton MM. Williams Gynecology, 3e; 2016 Available at: http://accessmedicine.mhmedical.com/content.aspx?bookid=1758&sectionid=118169397 Accessed: November 06, 2017

Copyright © 2017 McGraw-Hill Education. All rights reserved
PEDIATRIC EXAMINATIONS
Methods

◦ Voluntary – Patient Cooperation
◦ Parental Assistance
◦ Examination under Anesthesia
Examination

- Abdominal examination
- External examination
  - Appropriate in most circumstances
- Adolescents
  - Internal pelvic examination (speculum/bimanual) appropriate only in those who have been sexually active and are emotionally mature enough
- EUA may be needed
- Rectal examination
  - Utility outside of OR unclear/limited
- Parent’s lap - <3y
- Frog leg - >3y
- Stirrups
- Prone knee-chest
Persistent vaginal discharge
Possible foreign body
Non-compliant in office
Severity outweighs risks
- Otoscope without earpiece
- Operative eye loops
- Colposcope
- Pediatric Pedersen or Huffman
- Killian nasal speculum with fiberoptics
- Vaginoscopy – endoscope or hysteroscope

Photograph taken during vaginoscopy in an 8-year-old female. Typical for prepubertal girls, the cervix is almost flush with the proximal vagina.

Source: Pediatric Gynecology, Williams Gynecology, 3e
Citation: Hoffman BL, Schorge JO, Bradshaw KD, Halvorson LM, Schaffer JI, Corton MM Williams Gynecology, 3e; 2016 Available at: http://accessmedicine.mhmedical.com/content.aspx?bookid=1758&sectionid=118169397 Accessed: November 06, 2017
Copyright © 2017 McGraw Hill Education. All rights reserved
ADOLESCENT ADNEXAL MASSES
Adnexal masses in Adolescents

- Less than 25% of ovarian neoplasms in adolescents are malignant
- #1: Benign cystic teratoma (dermoid)
Ovarian

- functional cysts (follicular, corpus luteum)
- endometriosis
- benign neoplasms (teratomas, serous and mucinous cystadenoma)
- malignant neoplasms (germ cell, sex-cord or stromal tumor, epithelial carcinoma)
- torsion

Sonogram revealing characteristics of mature cystic teratoma. (Used with permission from Dr. Elysia Moschos.)

Source: Pelvic Mass, Williams Gynecology, 3e
Citation: Hoffman BL, Schorge JO, Bradshaw KD, Halvorson LM, Schaffer JI, Corton MM. Williams Gynecology, 3e; 2016 Available at: http://accessmedicine.mhmedical.com/Content.aspx?bookId=1758&sectionId=118168387 Accessed: November 07, 2017

Copyright © 2017 McGraw-Hill Education. All rights reserved
Tubal

- tubo-ovarian abscess,
- Hydrosalpinx
- ectopic pregnancy
Vaginal/Uterine

- Anomalies
- Obstructed hemi-vagina
- Transverse vaginal septum
- Imperforate hymen
Other:
- Peritoneal inclusion cysts
- Rudimentary horn
- Paratubal cysts/Paraovarian cysts
  - Most common paramesonephric = hydatid of Morgagni
  - Dangles from fimbria/pedunculated
  - Neoplastic resemble ovarian origin
  - Cystadenoma/cystadenofibroma
  - Rarely malignant

Solid:
- Most common: leiomyoma
- Rare solid: Wolffian duct remnant, sarcoma, lymphoma, adenocarcinoma, pheo, choriocarcinoma

Gastrointestinal:
- appendiceal abscess

Urinary:
- pelvic kidney
Causes of Pain

- Torsion
- Cyst rupture
- Hemorrhage into a cyst
- Abscess/Scarring
- Obstruction
  - Cyclic pain
- Ectopic pregnancy
- Non-gyn
  - Bowel/appendicitis
  - Urinary tract
Menstrual cyclicity
Sexual activity
Contraceptive practices
Sexually transmitted disease exposure

- Intercourse:
  - 83-88% (F/M) also engaged in oral sex
- No history intercourse
  - 25% reported oral sex (2005 National Survey of Family Growth)
Testing

- Sexually active
  - hCG!
- Not Sexually active
  - hCG!
- CBC
- Possible: (urine) GC/Clz; UA
- Imaging
  - Ultrasound – typically transabdominal unless clearly able to tolerate TVUS based on hx
    - Sonolucent, smooth walls & lack septations / solid components = low risk
  - MRI – after US for suspected anomalies
  - CT – GI/infectious etiologies
Functional cysts

- Serial ultrasounds
- Pain management
- Surgery if ineffective or torsion suspected
- Oral contraceptives
  - Do not speed resolution
  - Prevent additional cyst formation which can make monitoring difficult occasionally
  - Particularly useful if recurrent and affecting ADL
Torsion

- Prompt treatment reduces risk of loss of ovarian function
- >50% additional diagnosis with procedure (such as neoplasm)
Paratubal / Inclusion cysts

- Simple cysts, extra-ovarian sonolucent cysts
- Serial ultrasounds
- No intervention needed unless solid
SMALL GROUPS

SMALL GROUPS

Resources

- ABOG PEARLS of EXCCELENCE
- APGO videos available through apgo.org link or Youtube