Common Gynecologic Conditions in Adolescent Girls

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Objectives

• Be able to identify common gynecologic conditions in adolescent girls
• Be able to evaluate common gynecologic conditions in adolescent girls
• Be able to treat and manage common gynecologic conditions in adolescent girls
Adolescent: a young person who has begun puberty but has not yet become an adult

“”What do you call 60yo who hasn’t reached puberty? A late boomer.”
Dysmenorrhea
Dysmenorrhea
Primary Dysmenorrhea

Definition

• Painful menstruation (menstrual cramping) in the absence of pelvic pathology -
• Begins when adolescents attain ovulatory cycles, within 6-12 months of menarche
• Pathophysiology related to prostaglandins and leukotrienes

Prevalence

• Range from 50%-90% of adolescent girls and young women

Associated Symptoms

• Nausea
• Vomiting
• Diarrhea
• Headaches
• Muscle cramps
• Poor sleep quality
Dysmenorrhea: Primary versus Secondary

**Evaluation**

- **History:** medical, gynecologic, menstrual, family and psychosocial
- Pelvic exam NOT necessary if only primary dysmenorrhea suspected
- Cultural differences in attitudes about menses may affect how comfortable patient is with discussion of menstrual-related symptoms

**Suspect secondary if**

- Symptoms suggest STI
- Severe dysmenorrhea immediately after menarche
- Progressively worsening dysmenorrhea
- Abnormal uterine bleeding: both heavy menstrual bleeding and irregular bleeding
- Lack of response to empiric medical treatment
- Family history of endometriosis
Treatment of Primary Dysmenorrhea

Nonsteroidal Antiinflammatory Agents

• Interrupts cyclooxygenase-mediated prostaglandin production
• Most effective when started 1-2 days before onset of menses and continued through the first 2-3 days of bleeding
• Taking with food and increased fluid intake may decrease GI and renal adverse effects

NSAIDs Dosage

• Ibuprofen: 800mg initially, then 400-800mg Q8h prn
• Naproxen sodium: 440-550mg initially, then 220-550mg Q12h prn
• Celecoxib: 400mg initially, then 200mg Q12h prn
Treatment of Primary Dysmenorrhea

Hormonal Agents

• Can be used if NSAIDs do not provide adequate relief OR as a first-line option
• Mechanism likely prevention of endometrial proliferation and/or ovulation, thus decreasing prostaglandin and leukotriene production
• Continuous regimens may give more rapid onset of pain reduction

Hormonal Agents

• Oral contraceptive pills,
• Contraceptive patch or vaginal ring,
• Single-rod contraceptive progestin implant,
• Depot Provera IM or SQ,
• levonorgestrel-releasing intrauterine system (LNG-IUS), continuous norethindrone 5mg (norethisterone acetate)

Complementary & Alternative Therapies

• Modification of diet, exercise, yoga
• Dietary supplements: fenugreek, ginger, fish oil, vitamin B1
• Smoking cessation
• Acupuncture
• Heat treatment
Secondary Dysmenorrhea

Further Evaluation

- Painful menses due to pelvic pathology or a recognized medical condition
- Warranted if pain lasts for 3-6 months despite empiric treatment
- Focus history on familial, GI, urologic, musculoskeletal, and psychosocial etiologies
- Consider a pelvic exam
- Consider a pelvic ultrasound

Pelvic Examination

- **Endometriosis**
- Obstructed reproductive tract anomaly
- Enlarged/irregularly shaped uterus
- Cervical friability or discharge (PID)
- Pelvic masses (ovarian cysts)

Pelvic Ultrasound

- Obstructive reproductive tract anomaly
- Uterine myomas (fibroids)
- Adnexal masses (endometriomas)
**Hyperandrogenic Adolescent**

### Definition
- Most common and recognizable symptoms are **hirsutism** and **acne**.
- Hirsutism: excessive terminal hair growth in a adult male distribution (face, sternum, lower abdomen, back and thighs)
- No clear consensus guidelines on diagnostic criteria for PCOS in adolescent girls within 2 years of menarche

### Prevalence
- Polycystic ovarian syndrome (PCOS) is the most common cause of persistent hyperandrogenism beyond early puberty
- PCOS estimated to affect 6-15% of reproductive age women
- Hirsutism affects 5-10% of reproductive-aged females
- Acne vulgaris affects as many as 90% of all adolescents

### Associated Symptoms/Differential Diagnosis
- Alopecia
- Physiologic hyperandrogenism of puberty
- Idiopathic hyperandrogenism
- PCOS
- Nonclassic congenital adrenal hyperplasia
- Hypothyroidism
- Androgen-secreting tumors
- Cushing disease
- Severe hyperprolactinemia
Hyperandrogenic Adolescent

**Evaluation**

- **History**: age of thelarche, adrenarche, menarche, hair removal techniques, menstrual history, use of anabolic steroids/testosterone, menstrual history (frequency/duration), timing and progression of acne/hirsutism (with record of prior treatments)
- If obesity present, timing and progression of weight gain
- Family history of hirsutism, severe acne, PCOS, or obesity
- Determine the degree to which acne or hirsutism bothers the patient

**Physical Exam**

- BMI
- Blood pressure
- Skin evaluation: hirsutism, acne severity, acanthosis, skin tags
- External evaluation of genitalia

**Lab Values**

- Regular menses: Free/total testosterone, DHEAS (dehydroepiandrosterone sulfate), 17OHP (hydroxyprogesterone)
- Irregular menses: LH, FSH, Prolactin, TSH, Free/total testosterone, DHEAS, 17OHP
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Secondary Dysmenorrhea

Definition

• Painful menses due to pelvic pathology or a recognized medical condition
• The most common cause of secondary dysmenorrhea: Endometriosis

Other Causes

• Ovarian cysts
• Obstructive reproductive tract abnormalities
• Pelvic Inflammatory Disease
• Uterine leiomyomas
• Cervical stenosis
• adenomyosis
Secondary Dysmenorrhea

**Evaluation**

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The way to get started is to quit talking and begin doing.

Walt Disney
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**Hormonal Agents**

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Summary

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