UNIT THREE: GYNECOLOGY
EDUCATIONAL TOPIC 36: SEXUALLY TRANSMITTED INFECTIONS (STI) AND URINARY TRACT INFECTIONS (UTI)

Rationale: Early recognition and treatment of urinary and pelvic infections may help prevent short and long-term morbidity. Prevention of sexually transmitted infections is a major public health goal.

Intended Learning Outcomes:
The student will demonstrate the ability to:

- Describe the guidelines for STI screening and partner notification/treatment
- Describe STI prevention strategies, including immunization
- Describe the symptoms and physical exam findings associated with common STIs
- Discuss the steps in the evaluation and initial management of common STIs including appropriate referral
- Describe the pathophysiology of salpingitis and pelvic inflammatory disease
- Describe the evaluation, diagnostic criteria and initial management of salpingitis/pelvic inflammatory disease
- Identify the possible long-term sequelae of salpingitis/pelvic inflammatory disease
- Describe the diagnosis and management of UTIs

TEACHING CASE

CASE: A 16-year-old G_1P_1, LMP one week ago, presents with a one-week history of severe lower abdominal pain. Pain is constant, bilateral and accompanied by fever and chills. She has had some nausea and several episodes of vomiting. She has been sexually active for 3 years and has had unprotected intercourse with several partners. She denies irregular bleeding, dysmenorrhea or dyspareunia. Past medical history is non contributory. Past surgical history is remarkable for tonsillectomy as a child and an uncomplicated vaginal delivery one year ago.

Physical exam reveals an ill appearing 16-year-old with a temperature of 37 degrees Celsius and has a pulse of 94 bpm, BP 124/82 and a respiratory rate 22 breaths/minute. On examination of the abdomen, bowel sounds are present, there is bilateral lower abdominal tenderness and the abdomen is slightly distended with rebound, negative psoas and Murphy's signs. Pelvic exam reveals the BUS (Bartholins, Urethral, Skene's glands) to be normal and the vagina to be pink, moist. There is a purulent discharge from the cervical os and the cervix appears indurated. The uterus is in the midline position and is soft and tender to palpation. There is bilateral adnexal fullness and moderate tenderness.

Laboratory evaluation includes positive GC, negative RPR and WBC 17.6 with a left shift. Urinalysis is remarkable for few WBC's, no bacteria, no leukocyte esterase, no nitrites, 3+ ketones and negative urine HCG.

COMPETENCY-BASED DISCUSSION & KEY TEACHING POINTS:
Competencies addressed:

- Patient Care
- Medical Knowledge
- Interpersonal and Communication Skills
- Systems-Based Practice

1. What is your differential diagnosis for abdominal pain in a sexually active female?

2. What is the most likely diagnosis in this case?

3. What are the most likely organisms responsible for this condition?

4. What are the common presenting signs and symptoms for this condition?

5. What is the definitive diagnostic tool for equivocal cases?

6. What criteria will you use to determine inpatient vs. outpatient treatment?

7. What is your management and follow-up plan?

8. If this condition went untreated, what would be the possible sequelae?

9. How would one rule out and diagnosis of UTI in this patient?

REFERENCES

Beckman CRB, et al. *Obstetrics and Gynecology*. 6th ed. Philadelphia: Lippincott, Williams & Wilkins, 2009.

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Centers for Disease Control and Prevention. Sexually Transmitted Disease Treatment Guideline 2006. www.cdc.gov/std/treatment/

ACOG Practice Bulletin 91, Treatment of UTI in Nonpregnant Patients, October 2005.