

## **Educational Topic 36: Sexually Transmitted Infections**

### **Student Handout**

#### **Clinical Case:**

A 16-year-old G<sub>1</sub>P<sub>1</sub>, 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 negative except for childhood illness. 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 who is afebrile and has a pulse of 94 bpm, BP 124/82 and a respiratory rate 22 breaths/minute. On examination of the abdomen, 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 negative and the vagina 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, 3+ ketones and negative urine HCG.

#### **Discussion questions:**

1. What is your differential diagnosis?
2. What is the most likely diagnosis?
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 followup plan?
8. If this condition went untreated, what would be the possible sequelae?

#### **References:**

*Obstetrics and Gynecology* by Beckmann 5<sup>th</sup> Edition, 2006; Chapter 28 *Sexually Transmitted Diseases*. Pages 273-287.

*Essentials of Obstetrics and Gynecology* by Hacker and Moore 4<sup>th</sup> Edition, 2004; Chapter 23 *Pelvic Infections*. Pages 296-308.

Centers for Disease Control and Prevention. Sexually Transmitted Disease Treatment Guideline 2006. [www.cdc.gov/std/treatment/](http://www.cdc.gov/std/treatment/)

The APGO Educational Objectives related to this topic are the following:

- A. Differentiate the signs and symptoms of the following STIs: \*
  - 1. Gonorrhea
  - 2. Chlamydia
  - 3. Herpes simplex virus
  - 4. Syphilis
  - 5. Human papillomavirus infection
  - 6. Human immunodeficiency virus (HIV) infection
  - 7. Hepatitis B virus infection
  
- B. List the physical and clinical finding in the following STIs: \*
  - 1. Gonorrhea
  - 2. Chlamydia
  - 3. Herpes simplex virus
  - 4. Syphilis
  - 5. Human papillomavirus infection
  - 6. Human immunodeficiency virus (HIV) infection
  - 7. Hepatitis B virus infection
  
- C. Describe the methods of evaluation for the following STIs: \*
  - 1. Gonorrhea
  - 2. Chlamydia
  - 3. Herpes simplex virus
  - 4. Syphilis
  - 5. Human papillomavirus infection
  - 6. Human immunodeficiency virus (HIV) infection
  - 7. Hepatitis B virus infection
  
- D. Describe the management of the following STIs: \*
  - 1. Gonorrhea
  - 2. Chlamydia
  - 3. Herpes simplex virus
  - 4. Syphilis
  - 5. Human papillomavirus infection
  - 6. Human immunodeficiency virus (HIV) infection
  - 7. Hepatitis B virus infection
  
- E. Describe the pathogenesis of salpingitis \*
- F. List the signs of symptoms of salpingitis \*
- G. Describe the management of salpingitis \*
- H. Identify the long-term sequelae of salpingitis including: tubo-ovarian abscess, chronic salpingitis, ectopic pregnancy, infertility\*
- I. Counsel the patient about the public health concerns for STI's, including screening programs, costs, prevention and immunizations, and partner evaluation and treatment
- J. Describe the diagnosis and management of UTIs \*

\*Designated as Priority One in the APGO Medical Student Educational Objectives, 8<sup>th</sup> Edition