Case for the week of 6/3/2013 - 6/9/2013

Time	Patient Name	Age	Type	Notes
11:40 AM	Goodman, Cynthia	20 F	WALK-IN	Abdominal pain

*NOTE: This is not a real patient!

A 20-year-old woman (G2P1011) presents to clinic with complaints of two days of bilateral lower abdominal pain. She reports that the pain is constant, worse with movement, and 8/10 at baseline. She has had some very minimal relief with NSAIDs. Her LMP was 3 weeks ago, but over the past few days she has observed some blood-tinged vaginal discharge. She also reports some mild nausea but no emesis. She tells you that she has had 4 sexual partners over the past year, but condom use has been inconsistent. She reports having had a negative HIV test 3 years ago during pregnancy.

PMH:
Prior GC infection (2011)

Meds:
Multivitamin

Soc Hx:
1 pack cig/week
No EtOH, no illicits
Lives w/ mother and 3yo daughter

ROS:
(+) fevers, (-) chills
(+) dysuria

Exam:

VS: T 38.0 HR 90 BP 128/70 RR 16 SpO_2 100% (RA) BMI 27.0
Gen: Appears mildly uncomfortable
CV: Normal S1S2, RRR, no M/R/G
Resp: Easy work of breathing, lungs CTAB
GI: Abdomen soft, (+) TTP in bilateral lower quadrants, no rebound, negative Murphy's sign, no McBurney's point tenderness, (+) mild voluntary guarding, BS normal
Pelvic: (+) Yellow discharge at cervical os with hyperemia of cervix,
(+) Cervical tenderness on bimanual exam, no adnexal masses

To guide management, what is the single MOST IMPORTANT lab test to order at this time?

A. Cervical swab for GC and chlamydia
B. Urinalysis with microscopy
C. CBC with differential
D. Urine pregnancy test
E. HIV Ab testing

Your stat labs return showing: WBC 9, H/H 12/35, UA with hyaline casts, urine pregnancy test negative, urine culture pending, GC/chlamydia pending, HIV pending

Now, what is the MOST APPROPRIATE next step in management?

A. Admit for urgent laparoscopic surgery
B. Admit for IV cefoxitin and PO doxycycline
C. Admit for IV clindamycin and IV gentamicin
D. Administer IM ceftriaxone in clinic and prescribe PO doxycycline
E. Defer treatment until after additional lab results return

Answers:

To guide management, what is the single MOST IMPORTANT lab test to order at this time?

A. Cervical swab for GC and chlamydia
B. Urinalysis with microscopy
C. CBC with differential
D. <u>Urine pregnancy test</u>
E. HIV Ab testing

Your stat labs return showing: WBC 9, H/H 12/35, UA with hyaline casts, urine pregnancy test negative, urine culture pending, GC/Chlamydia pending, HIV pending

Now, what is the MOST APPROPRIATE next step in management?

A. Admit for urgent laparoscopic surgery
B. Admit for IV cefoxitin and PO doxycycline
C. Admit for IV clindamycin and IV gentamicin
D. <u>Administer IM ceftriaxone in clinic and prescribe PO doxycycline</u>
E. Defer treatment until after additional lab results return

Discussion Points:

1. Approximately 1 million women contract pelvic inflammatory disease (PID) each year, and about 25% of these women will develop long term sequelae such as infertility or chronic pelvic pain. The majority of PID cases are caused by gonorrhea or chlamydia infections.
    - Clinical features vary, though a presenting complaint of lower abdominal pain is typical. Other potential symptoms include abnormal vaginal discharge, abnormal bleeding, dyspareunia, nausea/vomiting, and fever.
    - On bimanual pelvic examination, findings of **cervical motion tenderness, uterine tenderness, or adnexal tenderness** strongly suggest the diagnosis and justify starting **empiric treatment**.
2. In a woman of childbearing age who presents with a gynecologic complaint, remember to suspect pregnancy until proven otherwise. In this case, pregnancy status will alter medication choices and venue (inpatient vs. outpatient) of treatment.
3. Outpatient therapy is sufficient for most patients with PID. Scenarios where inpatient treatment with IV antibiotics should be considered include:
    - Pregnancy
    - Severe illness, inability to tolerate PO meds, or no response to outpatient therapy
    - Suspected pelvic abscess

- Inability to exclude a surgical emergency
- Uncertain diagnosis
- Follow-up not available within at least 72 hours

4. In the early 1990s, fluoroquinolone-resistant strains of *N. gonorrhoeae* emerged, and by 2007, the rate of FQ-resistant gonorrhea was sufficiently high that the CDC recommended against using this class in first line therapy. More recently, gonococcal resistance to oral cephalosporins (e.g., cefixime) has been observed, and in 2012, the CDC recommended against using these oral agents in the treatment of uncomplicated gonococcal infections.

5. For outpatient management of mild or moderate PID, the CDC recommends:
   - **One-time IM dose of ceftriaxone 250 mg**
     - or other IM 3rd gen cephalosporin; or IM cefoxitin plus PO probenecid
   - **PLUS doxycycline 100 mg BID x 14d**
   - **± Metronidazole 500 mg PO BID x 14d**
     - No consensus regarding anaerobic coverage, but compelling indications include *Trichomonas vaginalis* infection, bacterial vaginosis, and recent uterine instrumentation

6. In outpatients with uncomplicated GC/chlamydia infection ***who do not have PID***, the CDC recommends:
   - Chlamydia: azithromycin 1 g PO once OR doxycycline 100 mg PO BID x 7d
   - Gonorrhea: ceftriaxone 250 mg IM once (or other IM cephalosporin) PLUS EITHER:
     - Azithromycin 1 g PO once OR doxycycline 100 mg PO BID x 7d

References for further reading:

Gradison M. Pelvic inflammatory disease. Am Fam Physician. 2012 Apr 15;85(8):791-6.
Pubmed ID: 22534388

Workowski K. In the clinic. Chlamydia and gonorrhea. Ann Intern Med. 2013 Feb 5;158(3):ITC2-1.
Pubmed ID: 23381058