

The Burning Issue
Sexually Transmitted Diseases

Pedicases

Objectives

- Review the differential diagnosis for dysuria
- Take a sexual history from an adolescent
- List common sexually transmitted diseases (STDs) in adolescents
- Review STD treatment guidelines
- Discuss diagnosis and management options for pelvic inflammatory disease (PID)

Part I: Introduction

A 17 year old girl in the twelfth grade at the local high school presents to your office for an urgent care visit. From the outset, Anna appears uncomfortable, not making eye contact and shifting around in her chair. She is complaining of five days of burning with urination. She has never had these symptoms previously.

Part I: Introduction

Past Medical History:

Anna has been in the office several times in the past two years for urgent care (gastroenteritis, viral pharyngitis and respiratory infections) but has not had a recent annual physical examination; no previous health problems. Her last annual visit notes no sexual activity. No history of prior urinary tract infections (UTIs).

Anna does not take any medications regularly.

Part II: Next Steps

Anna denies urinary urgency, frequency, or hesitation. She thinks her urine appears the same – she has not noted any blood in the urine, no foul smell, and no cloudiness.

Comprehensive review of symptoms is negative for fever, chills, nausea, vomiting, abdominal pain, flank pain, and vaginal discharge. Her last menstrual period was three weeks ago. Menses are usually regular and she describes no intermenstrual spotting.

Part II: Next Steps

Anna informs you that she became sexually active over a year ago. Through your questioning, you find out that she has had vaginal intercourse with three male partners. Last intercourse was over two weeks ago. She informs you that she has neglected to use condoms on several occasions. Anna has not been using any form of birth control other than condoms. She is worried because she thinks that her last partner was cheating on her. After a long pause, she admits that she had received a message from this partner blaming her for giving him a sexually transmitted infection. She has no other information and does not know the name of the infection.

Part II: Next Steps

Physical Exam:

Anna appears anxious but is otherwise comfortable, and in no acute distress. She is afebrile with a normal heart rate and blood pressure. Her abdomen is soft with normal bowel sounds and no suprapubic tenderness; there is no costovertebral angle (CVA) tenderness. She has Tanner V pubic hair distribution, external genitalia appear normal with no lesions or ulcerations. On speculum exam, mucopurulent vaginal discharge seen in vaginal vault. Shotty, nontender inguinal lymphadenopathy bilaterally. On bimanual exam, there is no significant cervical motion tenderness, no adnexal or uterine tenderness. She ambulates without difficulty. The remainder of the exam is within normal limits.

Part II: Next Steps



Image: Mucopurulent vaginal discharge, CDC STD Prevention Module (PID)
Retrieved from <http://www2a.cdc.gov/stdtraining/self-study/pid/pid-sb5.asp> 10/31/13

Laboratory Results

Urine dip

Leukocyte Esterase 1+	Ketones -----
Nitrite -----	Urobilinogen -----
pH 5	Bilirubin -----
Protein trace	Blood -----
Glucose -----	Specific gravity 1.025

Urine gram stain: negative for organisms.

Urine HCG: negative

Laboratory Results

Vaginal discharge:

- ph 4.5
- Negative whiff test
- NS slide: Squamous epithelial cells with no adherent coccobacilli (clue cells); >10 WBCs per high-power field; no motile trichomonads noted
- KOH slide: no pseudohyphae or spores present

Part III:

You obtain NAAT testing (vaginal swabs) for Chlamydia and gonorrhea, as well as send a clean catch urine specimen. You decide to treat Anna with ceftriaxone and azithromycin at the visit and obtain a confidential contact number to notify her of results. Anna's NAAT testing eventually returns positive for Chlamydia, negative for GC. Her urine culture shows no growth. You inform her of results and let her know that previous partners should be informed and treated, and that she should not have intercourse for at least seven days after treatment. You ask her to follow-up in 3 months for re-screening, or sooner if she develops abdominal pain, fever, nausea, or vomiting.

Part III:

Two months later, you receive notice that Anna was seen in the local emergency department (ED) for abdominal pain and admitted to the hospital. Per the ED note, Anna presented with several days of nausea, fever, decreased PO intake, and intense right upper quadrant abdominal pain with 1 week of diffuse abdominal “discomfort.” Review of systems was otherwise negative. She denied being in a current relationship; ED note documents recent “breakup” with partner. Her exam was significant for marked RUQ pain with positive Murphy’s sign, no lower abdominal tenderness. A pelvic exam was not performed.

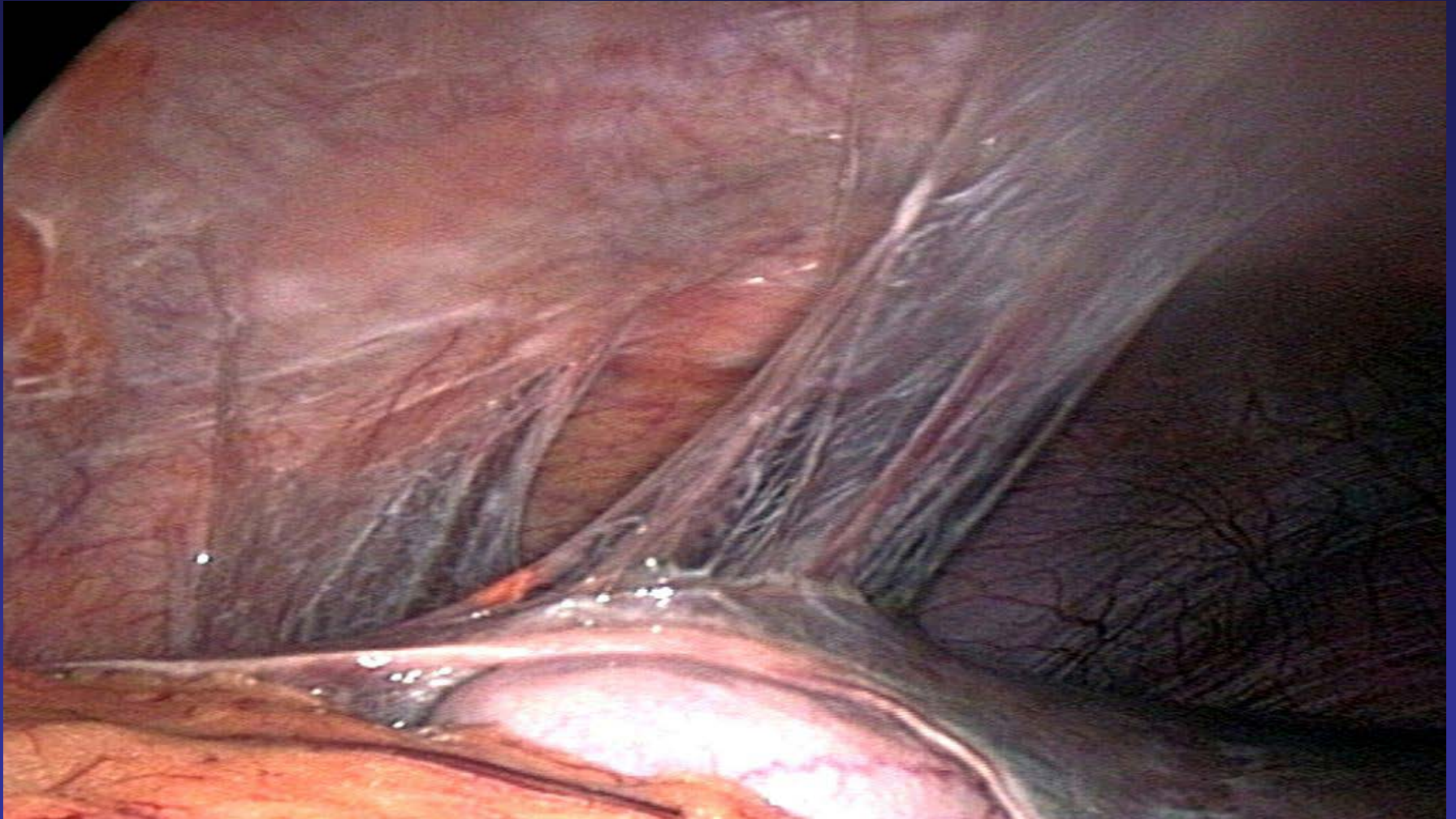
Part III:

Additional workup in the ED included:

- HCG negative
- WBC 11.6
- ESR 30, CRP 1.5
- Liver function tests normal
- CXR normal
- Transabdominal US pelvis normal, no free fluid in cul-de-sac, appendix not visualized
- RUQ ultrasound 4 echogenic shadowing gallstones with sonographic Murphy's sign, no gallbladder wall thickening

Anna was admitted to the surgery service, started on Piperacillin/tazobactam (Zosyn), and eventually taken to the operating room for planned laparoscopic cholecystectomy when she failed to improve.

Laparoscopic Picture



Credit: Retrieved from http://commons.wikimedia.org/wiki/File:Perihepatic_adhesions.jpg
Author: Gloecknerd; Source: Own work

Part IV: Epilogue

Anna is started on parenteral antibiotics during her inpatient stay. Over the next 48 hours, her pain and nausea improve and she is able to transition to oral doxycycline. A repeat NAAT test shows Chlamydia. Although Anna was observed taking treatment during the office visit two months ago, she admits that she is not sure that her partner was ever treated and she continued to have intercourse with him using condoms about 75% of the time. She follows up several days after discharge and has resolution of symptoms.