RUQ Pain That Fits

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Case Presentation

• 23 year old caucasian female
• Acute right upper quadrant abdominal pain for 2 days
• Otherwise healthy
Physical Exam

• Vitals: afebrile, stable

• Abdomen: soft, moderate tenderness to palpation in RUQ just under costal margin, rebound tenderness negative, good bowel sounds

• No history of abdominal surgery
Initial Work up

• WBC: 18K
• LFTs, lipase, creatinine normal
RUQ US

- RUQ US:
  2 peripancreatic lymph nodes <2cm, likely reactive

- Monospot test, CMV serology, HIV and Hepatitis B and C testing were normal
Consult to Surgery

• Evaluated by General Surgery
• Not felt to have surgical problem
• CT abdomen and pelvis with contrast
CT Images

Normal Liver

Ovarian varices
What Are We Missing?

• Continued pain, managed with IV ketorolac and acetaminophen
Sexual History

- Sexually active
- LMP 26 days ago
- Serum Beta HCG negative
- Possible increased discharge
Consult to Ob/Gyn

- Pelvic exam negative for cervical or adnexal tenderness
- Vaginal swabs were obtained
- Wet prep and gram stain negative
Nucleic acid amplification testing (NAAT) of vaginal swabs was positive for Chlamydia RNA and negative for Neisseria gonorrhea.
DISCUSSION
Pain RUQ

**Liver**
- Acute hepatitis
- Perihepatitis
- Liver abscess
- Budd Chiari Syndrome
- Portal vein thrombosis

**Gall Bladder**
- Biliary colic
- Acute cholecystitis
- Acute cholangitis
- Sphincter of Oddi Dysfunction

FITZ HUGH CURTIS SYNDROME
Fitz Hugh Curtis Syndrome

- Perihepatitis associated with pelvic inflammatory disease
- Marked tenderness in the RUQ
- Females of reproductive age

Pathophysiology

• First associated with gonococcal salpingitis in 1920 and subsequently with *C. trachomatis*

Bacteria spread by means of direct extension along the right paracolic gutter.
Incidence

PID 1 million US women annually

N. gonorrhea/C. trachomatis 70%

FHC 4-14%

Diagnosis

- Aminotransferases normal or slightly elevated
- Imaging studies might be unrevealing
- Testing for gonorrhea and chlamydia

**CLINICAL DIAGNOSIS**

CT Findings

Pelvic
- Abnormal Endometrial Enhancement
- Engorgement of Ovaries
- Fluid Collection in Posterior Cul-de-sac

RUQ
- Hepatic Capsular Enhancement
- Perihepatic Inflammatory Fat Stranding
- Periportal Edema

Laparoscopy

Parietal Peritoneum

Adhesions

Liver Surface

Treatment

- **Antibiotics** for the underlying infectious agent
- **Chronic Adhesion:** Laproscopic adhesiolysis
Our Patient...

- **Ceftriaxone** 250 mg IM once
- **Doxycycline** 100 mg PO BID for 14 days
- **Metronidazole** 500 mg PO BID for 14 days
- Sexual partner treated
- Symptoms resolution in 48hrs
- Subsequent testing at 3 months was negative

Pitfalls of Missed Diagnosis

- Hospitalization
- Pain medication
- Surgical procedures
- Long term complications

Take Home Message

• Fitz Hugh Curtis Syndrome

Know it to diagnose it!
THANK YOU