

Fitz-Hugh Curtis syndrome

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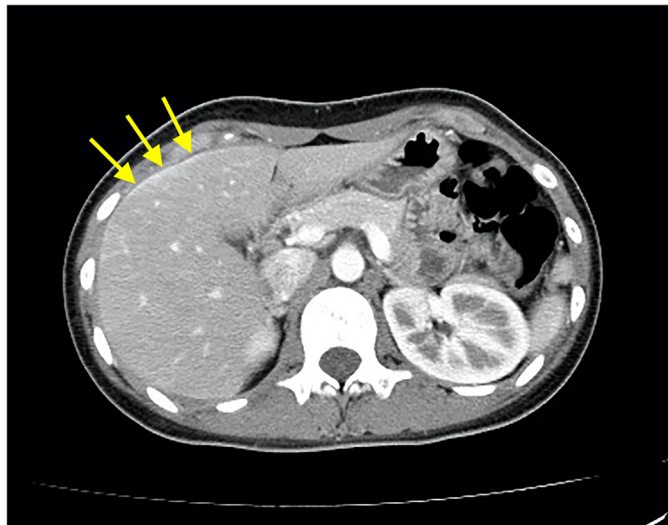


FIGURE 1.

CASE PRESENTATION

A previously healthy, 20-year-old female patient presented to the emergency department with a two-day history of right upper quadrant (RUQ) pain. The pain worsened with deep breathing or torso movement in any direction. She noticed a malodorous, greenish vaginal discharge one month before the current presentation. She had no respiratory, gastrointestinal or urinary symptoms and reported having regular sexual intercourse with a single partner using a condom. On presentation, she was hemodynamically stable. Her body temperature was 37.5 °C, and her other vital signs were normal. Abdominal examination revealed marked tenderness of the liver. Gynecological examination revealed no cervical migratory pain. Laboratory tests demonstrated leukocytes $10,200 \times 10^9/L$ (normal $3,300 - 8,600 \times 10^9/L$) and C-reactive protein 2.97 mg/dL (normal < 0.14 mg/dL). Liver function test results were normal, and a pregnancy test returned negative. Contrast-enhanced computed tomography (CT) demonstrated early enhancement along the hepatic surface which was consistent with Fitz-Hugh Curtis syndrome (Fig. 1). Polymerase chain reaction using an endocervical swab returned positive for *Chlamydia trachomatis* and negative for *Neisseria gonorrhoeae*, confirming the diagnosis.

Tests for other sexually transmitted diseases were negative. She received oral azithromycin for 14 days and intravenous, single-dose ceftriaxone.

Fitz-Hugh Curtis syndrome is a rare cause of RUQ pain in reproductive-aged female patients and consists of perihepatitis complicated by cervicitis or pelvic inflammatory disease. Increased enhancement along the hepatic surface on biphasic contrast-enhanced CT has a high sensitivity and specificity of about 90% each for the disease.¹ Liver enzyme levels are usually normal or only slightly elevated,² presumably because the inflammation is localized in the liver capsule. Fitz-Hugh Curtis syndrome is mostly caused by a chlamydia or gonococcal infection,³ and history-taking to determine sexual activity is important for its diagnosis. Prompt diagnosis and treatment are important because a genital chlamydia or gonococcal infection can cause infertility.⁴

DECLARATION OF COMPETING INTERESTS

None.

FUNDING

None.

REFERENCES

1. **Joo SH, Kim MJ, Lim JS, et al.** CT diagnosis of Fitz-Hugh and Curtis Syndrome: value of the arterial phase scan. *Korean J Radiol.* 2007;8(1):40–47.
2. **Peter NG, Clark LR, Jaeger JR.** Fitz-Hugh-Curtis syndrome: a diagnosis to consider in women with right upper quadrant pain. *Cleve Clin J Med.* 2004;71(3):233–239.
3. **You JS, Kim MJ, Chung HS, et al.** Clinical features of Fitz-Hugh-Curtis Syndrome in the emergency department. *Yonsei Med J.* 2012;53(4):753–758.
4. **Wiesenfeld HC, Hillier SL, Meyn LA, et al.** Subclinical pelvic inflammatory disease and infertility. *Obstet Gynecol.* 2012;120(1):37–43.