A rare cause of acute abdomen in a young female patient

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Question

A 37-year-old woman presented to the hospital with a 3-day history of right upper quadrant pain (RUQP), which worsened with deep breathing. On examination, she had fever (38°C) and RUQ tenderness. Laboratory tests showed white-cell count of $8.1 \times 10^9/L$ and C-reactive protein level of 29.4 mg/L. Liver profiles were within normal range (aspartate aminotransferase 20 U/L and alanine aminotransferase 22 U/L). Immediately, contrast-enhanced computed tomography (CECT) was performed (Figure 1). What is your diagnosis?

Answer

Arterial-phase CECT demonstrated increased perihepatic enhancement. Polymerase chain reaction testing of cervical discharge was positive for *Chlamydia trachomatis*. We made the diagnosis of Fitz-Hugh–Curtis Syndrome (FHCS). A thorough history-taking revealed that the patient had had unprotected sex with a partner. She completely recovered after azithromycin was administered.

FHCS is an acute perihepatitis as a rare complication of pelvic inflammatory disease (PID). Its main etiologic agents are *Chlamydia trachomatis* and *Neisseria gonorrhoeae*. FHCS is characterized by RUQP that is exacerbated by body movement and deep inspiration. Antibiotics with analgesics is the treatment of choice.

CECT has recently become a main diagnostic method for FHCS, while classical standard diagnosis requires invasive procedures such as laparoscopy and laparotomy (1,2). Hepatic capsular enhancement on CECT is a typical finding of FHCS. The finding reflects increased blood flow at the inflamed hepatic capsule (3).

Figure 1. — Arterial-phase contrast-enhanced computed tomography demonstrated increased perihepatic enhancement (A, axial view ; B, coronal view).

Because FHCS may present with isolated RUQP and no signs of PID, it can mimic other more common diseases including acute cholecystitis. Because FHCS can cause infertility and miscarriage, early diagnosis is crucial. Therefore, clinicians should consider FHCS as a possible differential diagnosis of RUQP in women and examine CECT.

Competing interests

None.

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