

Images in...

Epstein–Barr virus acute cholecystitis

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A previously healthy 22-year-old woman presented to our emergency department after 5 days of malaise, headache, fever and abdominal pain. Physical examination revealed abdominal tenderness in the right upper quadrant on deep palpation. There was no rebound tenderness. Blood test results showed: white blood cells $9.3 \times 10^9/l$ (61% lymphocytes, some of them atypical on a peripheral-blood smear), haemoglobin concentration 104 g/l, platelets $138 \times 10^9/l$ and high serum concentration of alkaline phosphatase (239 U/l), aspartate aminotransferase (329 U/l), alanine aminotransferase (464 U/l) and bilirubin (total 42.76 $\mu\text{mol/l}$; direct 41.04 $\mu\text{mol/l}$). A contracted gallbladder with wall thickness of 14 mm and pericholecystic fluid were noted on abdominal ultrasonography (figure 1A, arrows). CT imaging revealed similar findings with enhancing gallbladder mucosa (figure 1B,C, arrows),

marked hepatosplenomegaly, lymphadenopathy, scant intraperitoneal fluid and absence of cholelithiasis or biliary tree abnormalities. Bearing in mind the presence of the aforementioned clinical, laboratory and radiologic findings in a young woman, Epstein–Barr virus (EBV) acute infection was suspected. Serum serological studies were subsequently diagnostic for this viral disease (positive both heterophile antibody test and IgM against EBV capsid antigens; negative IgG against EBV capsid antigens). Moreover, there was no evidence of other coexisting infectious disorders. Management was conservative on a watchful waiting basis and she was discharged asymptomatic 6 days after admission. At a follow-up 2 years later, the patient remained well. Acute acalculous cholecystitis accounts for 2%–15% of all cases of acute cholecystitis.¹ It is most commonly associated with trauma, recent surgery, shock, burns, sepsis, critical illness, total parenteral nutrition and

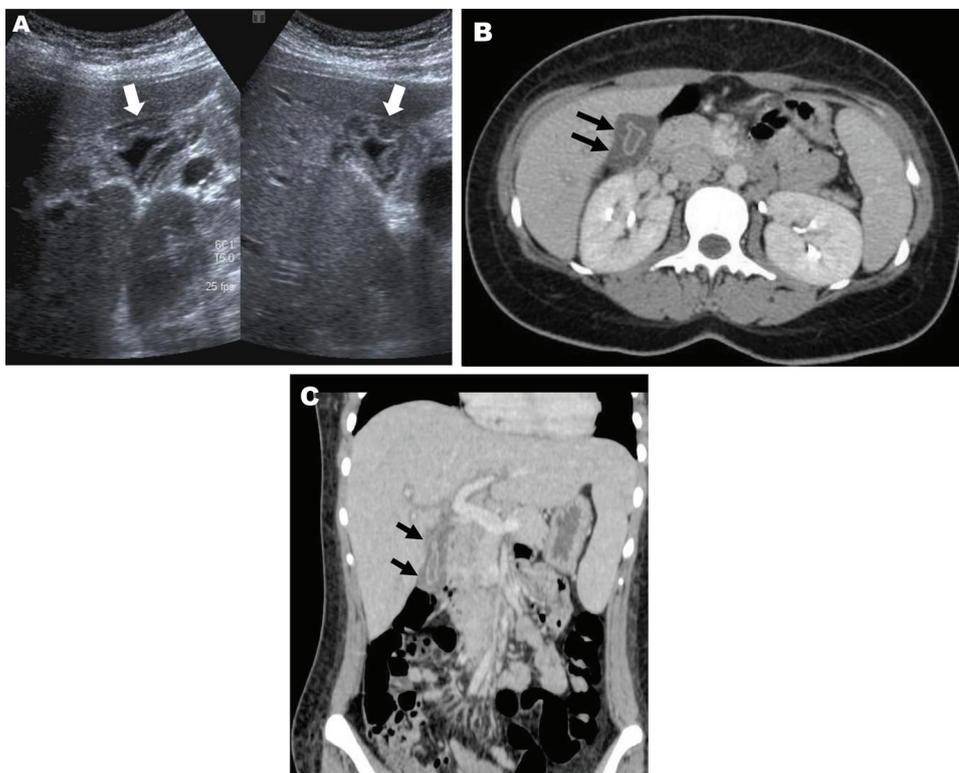


Figure 1 Abdominal imaging findings. Ultrasonography (A) and CT scan (B and C) of a 22-year-old woman showing a substantial thickening of the gallbladder wall (arrows).

prolonged fasting.¹ However, acute acalculous cholecystitis may also complicate the clinical course of EBV infection, a fact often overlooked due to the infrequency of such association. Indeed, only 13 cases of acute cholecystitis have been reported during the course of primary EBV infection, all from 2007.^{2–4} Of these cases, 12 were in female patients. Twelve patients had a favourable outcome under conservative management and only one patient needed cholecystectomy² (a 21-year-old woman with ulcerative colitis and azathioprine therapy). To sum up, clinicians should keep in mind that acute acalculous cholecystitis may complicate the course of EBV infection in order to avoid unnecessary surgery and inappropriate antibiotic treatment.

Competing interests None.

Patient consent Obtained.

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