

Case report

Acute cholecystitis that must not be operated



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Abstract

Tuberculosis (TB) is an infectious disease caused by *Mycobacterium tuberculosis* usually involving the lung parenchyma and hilar lymph nodes. Extra-pulmonary involvement is seen in 20% of all TB cases. Tuberculosis (TB) of the breast is an uncommon disease, particularly in men. Tuberculous mastitis is a rare form of extrapulmonary tuberculosis, the first case of breast TB was reported in a woman in 1829, but the first detailed description of the disease was only made by the end of the 19th century. The first case of breast TB in a man was reported about a century later in 1927, and by 1945 there were only 21 known cases of breast TB in men. It is generally believed that the infection of the breast is usually secondary to tuberculous foci elsewhere in the body, which may or may not be clinically apparent. In this case report, we describe pulmonary and mammary tuberculosis in an immunocompetent male patient.

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Introduction

It is commonly admitted that acute cholecystitis is a diagnostic and therapeutic emergency. However, there is not an "acute cholecystitis" but there are "acute cholecystitis". In fact, the two main chapters of acute cholecystitis are: acute lithiasic cholecystitis whose positive diagnosis, etiology and management are well codified by professional recommendations (the Tokyo guidelines 2013); acute non-lithiasic cholecystitis (ANC) which, in addition to the problems of diagnosis (particularly etiological) pose problems in matters of management and for some forms of them, cholecystectomy is prohibited. We expose through this presentation a form of acute cholecystitis in which cholecystectomy should be avoided because it only worsens the patient's situation.

Patient and observation

Mrs AE, 56 years old, consulted in emergency room for epigastric and right hypochondrium pain continuously evolving for 4 days. No scratch, blood transfusion or recent drug intake history were reported. Otherwise, the patient was not cholecystectomised. A clinical examination found jaundice, a body temperature at 37.8°C with a guarding at the right hypochondrium. Blood tests showed WBC: $3.9 \times 10^9/l$, CRP: 7.7 mg/l and high bilirubin level, total bilirubin: 182.3 $\mu\text{mol/l}$, conjugated bilirubin: 165.5 $\mu\text{mol/l}$. An abdominal ultrasound imaging was realized which describes an acute non-lithiasic cholecystitis (Figure 1) with perivascular effusion and discreet dilation of the intrahepatic bile ducts. The patient underwent magnetic resonance imaging (MRI) scan showing that the gallbladder was non-lithiasic with a thickening of the vesicular walls (Figure 2), infiltration of the liver bed and around the intra and extra hepatic bile ducts. Neither bile ducts, nor Wirsung dilatation were detected. There was also no lesion in the pancreas. The rest of the biological tests found significant cytolysis, AST: 3817 IU/l; ALT: 4185 IU/l. Through this clinical

case and despite the age of the patient, the diagnosis of acute non-lithiasic cholecystitis due to viral hepatitis A was strongly suspected. We performed the serology of hepatitis and our diagnosis was confirmed by a high level of HAV IgM antibody. An expectant attitude was then adopted with clinical and biological monitoring. The patient's condition was gradually improving with disappearance of the pains and progressive normalization of the biological tests.

Discussion

Viral hepatitis A is an immunizing disease that is linked to lack of potable water and inadequate sanitation and hygiene (mainly dirty hands). This explains why it frequently touches children and it is an epidemic in Africa. It is rarely reported among adults but it is not exceptional. Extra hepatic complications of hepatitis A are nephrological (acute renal failure, glomerulonephritis) [1], but they can also touch the gallbladder. Viral infections (VHA and EBV) are responsible for the majority of acute children's non-lithiasic cholecystitis [2] and must be mentioned in every case of ANC regardless of age, especially if traveling to endemic countries is reported and in the absence of vaccination. Mourani *et al.* reported the presence on immuno-histochemical examination, of VHA antigen in the gallbladder wall in a patient presenting ANC during VHA [3]. This confirms a direct link between VHA and ANC. Moreover, Juttner *et al.* showed that the degree of cytolysis appears to influence the degree of thickening of gallbladder wall [4]. The presence of major cytolysis in case of acute non-lithiasic cholecystitis, especially in Africa must always be a reminder of viral hepatitis A as an etiology and encourage performing VHA serology to confirm the diagnosis. In this case, the cholecystectomy should be avoided [5] because of the possible complications of this surgical procedure such as biliary ducts or vascular traumatic injuries and non-specific complications such as surgical wound infections and bedsores complications. Besides anesthetic

drugs can be responsible as well of liver toxicity [6]. All of these increase liver damage and can be life threatening. In case of a non-contributive ultrasound imaging or clinical warning signs, computed tomography (CT) scan must be performed in order to avoid wrong diagnosis and detect a gangrenous form imposing a change in therapeutic measures [7].

Conclusion

To sum up, in the presence of an acute non-lithiasic cholecystitis, the viral etiology is suspected in the presence of significant cytolysis and is sustained by serology results. In such an eventuality, cholecystectomy can be a source of complications for a patient whose liver is already suffering. Monitoring and symptomatic treatment usually improves the patient's condition and contributes to a clinical, biological and radiological normalization.

Competing interests

The authors declare no competing interests.

Authors' contributions

All the authors have read and agreed to the final manuscript.

Figures

Figure 1: ultrasound imaging showing a non-lithiasic gallbladder with thickened walls

Figure 2: a MRI axial view of the abdomen showing a significant thickening of the gallbladder wall

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Figure 1: ultrasound imaging showing a non-lithiasic gallbladder with thickened walls

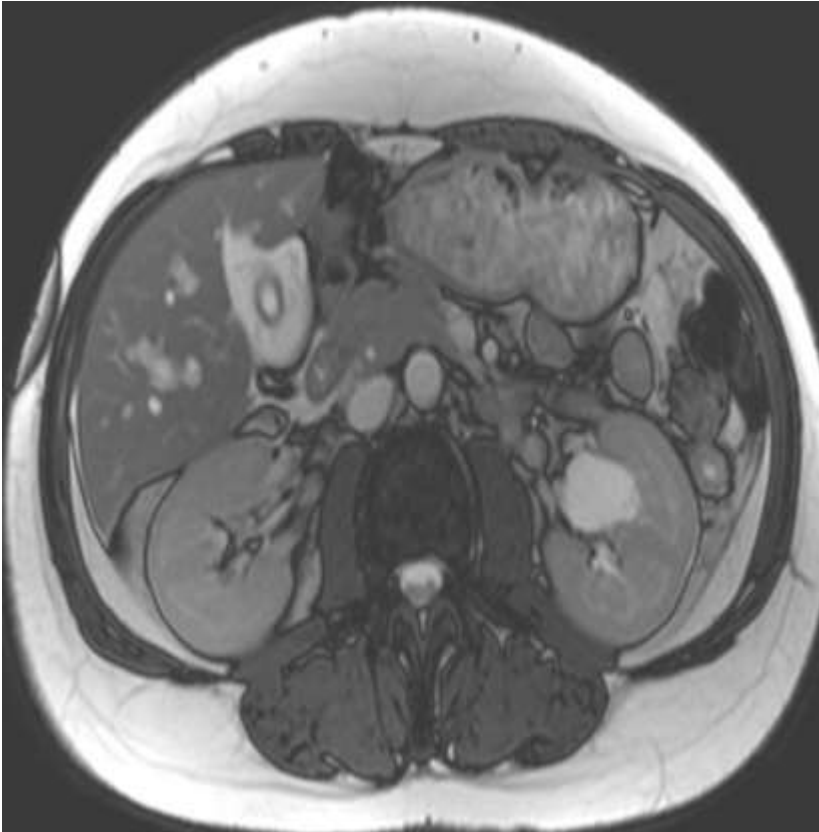


Figure 2: a MRI axial view of the abdomen showing a significant thickening of the gallbladder wall