Acute Acalculous Cholecystitis as a complication of systemic lupus in peripartum: a case report

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Abstract

Acute Acalculous Cholecystitis is defined as an acute necrotizing inflammatory disease of the gallbladder without cholelithiasis. We report a case of 34 – year –old woman who has been diagnosed with Systemic lupus erythematosus three years ago, At 37 weeks she visited emergency department in labour with fever, an infection was suspected and antibiotics were administered, and until the second day of hospitalization that we made the diagnostic of the Acute Acalculous Cholecystitis, the curative treatment was the cholecystectomy.

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The fever in the peripartum is frequently related to an infection, but in many times we should be vigilant to not to pass behind other causes,especially for women who have Systemic lupus erythematosus.

Keywords: Acute Acalculous Cholecystitis, Systemic lupus erythematosus, fever, peripartum

Introduction

Systemic lupus erythematosus (SLE) is a chronic multisystem autoimmune disease characterized by production of autoantibodies and polymorphic manifestations of end-organ damage [1]. The interaction of lupus and pregnancy is very complex, the consensus is that pregnancy can worsen the lupus disease process, even if this is not predictable, and pregnancy can mimic the clinical manifestations of lupus, particularly preeclampsia/eclampsia [2].

More specifically, pregnancy is associated in 50 to 60% of cases with a clinical flare manifesting. Several gastrointestinal manifestations, including mesenteric arteritis, bowel perforation, gastric or duodenal ulcer, lupus enterocolitis, spontaneous peritonitis and pancreatitis have been reported in association with SLE [3],its frequency is 30 % [3]. The Acute acalculos cholecystis (AAC) it's a rare manifestation that has been reported in SLE, but its occurrence in the peripartum has been described only for one time in literature[4].

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Patient and observation

A 34 – year –old woman, has been diagnosed with SLE three years ago, Hydroxychloroquine SULFATE, AZATHIOPRINE, and Corticoid was prescribed as treatment. She's G5P3, with one miscarriage and an intrauterine fetal death .she didn't have the preconception counseling. the last pregnancy was monitoring in our maternity from 32 weeks. At 37 weeks she visited emergency department in labour with fever. On admission, the body temperature of 40℃, the pulse rate of 90/min, the respiration rate of 20/min and the blood pressure of 120/60 mm Hg were noted. Cardiac, neurological, abdominal examination were normal and we didn't have any clinical orientation to diagnostic.an infection was suspected and antibiotics were administered. The full obstetrical examination allows a vaginal delivery. the newborn has an apgar of 10 and was 2700 g. Initial laboratory tests showed hs-CRP 172mg/L, WBC 8,470/mm3, Hb 12.6 g/dL, platelet 129,000/mm3, TP 81 %, AST 673 IU/L, ALT 264 IU/L. At the first day of the postpartum she has presented vomiting, abdominal ultrasound demonstrated gallbladder distention without biliary sludge. We concluded to an ACC and the curative treatment was the cholecystectomy without any postoperative complication.

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Discussion

During pregnancy, maternal morbidity is related to the interaction of several factors, including the activity of lupus disease. Indeed, many prospective studies have confirmed the occurrence of lupus flare in the order of 60% during pregnancy and postpartum .Overall pregnancy prognosis may be improved when lupus has been stable and controlled for more than a year [5].

Intrapartum fever is a common sign of infection,but in patient with SLE is always a challenge for diagnosis and treatment. It may be caused by an infection or a SLE flare. In our patient's case the fever was a sign of Acute Acalculous Cholecystitis.

AAC is defined as an acute necrotizing inflammatory disease of the gallbladder without cholelithiasis, with a multifactorial pathogenesis. It accounts for about 10% of all cases of acute cholecystitis (range: 2% to 15) [6] .

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The manifestations of acute acalculous cholecystitis can be insidious, characterized by unexplained fever, leukocytosis, hyperamylaseemia, or abnormal transaminases, and patients often have no right upper quadrant tenderness [7] .

Ultrasonography can be considered highly diagnostic if two of the following major criteria or one major and two minor criteria are met; Major criteria: Gallbladder wall thickness > 3 mm, striated gallbladder wall ,pericholecystic fluid, Ultrasonic Murphy sign, an intramural gas , mucosal detachment, Minor criteria : echogenic sludge or bile,Lateral diameter >5 cm [8] .

scintigraphy Tc-99m iminodiacetic acid cholescintigraphy is considered a very reliable test and can be performed even on seriously ill patients. Ideally, there is no visualization of the gallbladder [8].

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Several possible pathogens of SLE-associated AAC have been reported, including vasculitis, serositis, and mesenteric inflammatory veno-occlusive disease. Antiphospholipid syndrome has also been reported as a possible pathogenesis of AAC. Among these pathogenies, vasculitis is considered the most common pathogenesis of AAC associated with SLE [9].

AAC is known to have a high mortality rate, curative treatment includes cholecystectomy, for patients who are not candidates for surgery, cholecystostomy remains another option. For patients who cannot tolerate surgery or cholecystostomy, endoscopic nasobiliary drainage is a third option .High-dose steroid therapy has proven successful in some cases and may be tried in selected patients based on general condition, disease severity and associated risk factors [4] [10] .

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Conclusion

The AAC is an extremely rare manifestation of systemic lupus erythematous , it sometimes difficult to diagnose because the findings of abdominal symptoms or immunological abnormalities are not specific especially in peripatum.

All pregnancy must be planned during a preconception counseling appointment, particularly for women affected by lupus to elucidate possible contraindications to pregnancy or risk factors for obstetric complications in order to optimize the management

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