

Reviewer #1:

Scientific Quality: Grade C (Good)

Language Quality: Grade A (Priority publishing)

Conclusion: Minor revision

Specific Comments to Authors: Thank you for the very rare case report. The characteristic image findings of this case will be helpful to the reader. Please consider the following: Why is AMA-M2 help a preoperative diagnosis of EPS? Are there a similar case report? In general, surgery is recommended only in patients who have failed conservative medical therapy. please explain the surgical indication in this patient.

Reply:

1. In our case, an autoimmune liver test showed that AMA-M2 was positive, which is a specific biomarker of primary biliary cirrhosis (PBC). Additionally, alkaline phosphatase (ALP) ,Alanine transaminase (ALT) and Aspartate transaminase (AST) exceeded the normal. A gastroscopy showed much bile in the stomach and a MRI showed slight dilatation of the intrahepatic bile duct, hinting the presence of cholestasis. According to Consensus on the diagnosis and management of primary biliary cirrhosis (cholangitis), someone with positive mitochondrial antibody and abnormal biochemical markers of liver cholestasis like ALP can be diagnosed with PBC. Therefore, our patient might be diagnosed with cholestatic cirrhosis. According to previous case reports, liver cirrhosis is a high-risk factor for EPS. In conclusion, we speculated that AMA-M2 help a preoperative diagnosis of EPS.

2. There have been several cases indicating that liver cirrhosis was a high-risk factor for EPS. Satoshi et al. reported two patients with liver cirrhosis, who experienced persistent intraabdominal infection, were diagnosed with EPS. Wakabayshi et al. reported a case with perforative peritonitis caused by alcoholic liver cirrhosis was diagnosed with EPS at laparotomy. But the association of EPS with liver cirrhosis in patients who have a positive AMA-M2 hasn't been reported to date.

3. The patient has underwent conservative treatment for more than 20 days before referring to our hospital. But it didn't work. Relevant laboratory tests and imaging studies were taken to identify the causes in our hospital. But we just found the dilated gastric cavity and much gas in the small intestine. The patient was treated with appropriate medical treatment such as parenteral nutrition, antiemetic and improving gastrointestinal motility. However, these medication didn't ease his symptoms. Furthermore, endoscopy was done to find out the lesion. As a result, a protuberant lesion in the sigmoid colon (24cm away from the anus), with a size of 3*3cm and erosive surface, was discovered. In order to excise the mass for further diagnosis, the patient received surgical therapy. During the operation, a diagnosis with EPS was made. Therefore, surgeons dissected the membrane to release the trapped organs and removed the mass in the sigmoid colon.

Reviewer #2:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Major revision

Specific Comments to Authors: The author should describe better about "laparoscopy" in this manuscript: does it play a role in diagnostic measurement, or is it an etiology (as had been reported done for this patient). The author should describe the AMA-M2 examination: is it on purpose, or is it a coincidence finding?

Reply:

1. In our case, the patient experienced a laparoscopic cholecystectomy (LC) at a local hospital. And one month later, he complained of abdominal distension and bile vomiting. Similarly, a case complained of abdominal pain, bilious vomiting and constipation one year after the LC. Finally, he was diagnosed with EPS during an exploratory laparotomy. Therefore, laparoscopy played a role in an inducement to EPS. According to previous studies, laparotomy could be an alternative when imaging cannot diagnose with EPS and medical therapy fails to ease patients' symptoms.
2. The AMA-M2 examination was a coincidence finding. The laboratory tests showed high level of alkaline phosphatase (ALP), liver enzymes like Alanine transaminase (ALT) and Aspartate aminotransferase (AST), which suggested the presence of liver injury. To identify the causes, an ultrasound elastography and autoimmune liver tests were taken. Therefore, we found the AMA-M2 was positive. Then we searched the literature about this specific biomarker of primary biliary cirrhosis and found liver cirrhosis was a high-risk factor of EPS. Therefore, we speculated that there was a link between AMA-M2 with EPS.