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A Case Study of 1st Reported Torsion of Gallbladder in Malaysia

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Abstract: ***50 years old Chinese gentleman, with no known medical illness, initially presented to HSA with complains of abdominal pain, more on right hypochondriac region for 2 days, associated with vomitting about 2-3 times per day. The patient had no complains of fever, constipation or diarrhoea. The patient is this case report had a complete torsion of the gallbladder occluding both the bile and blood flows. The gallbladder was derotated on its peritonealised mesentry axis, along with adhesiolysis, and cholecystectomy which were all performed laparoscopically.***

Keywords: torsion, gallbladder, laparoscopically, occluding

1. Introduction

Cholecystitis has been linked to the torsion of the gallbladder .It has been identified that for every 365.520 patients who have been admitted, 1 patients is diagnosed with Cholecystitis caused by torsion of the gallbladder. It is also apparent with patients especially elderly female patients and the cases increase as the life expectancy of the patients increased. The occurance of the torsion of the gallbladder happens there is a variation anatomically in the patient's gallbladder which is fixated to the liver[1]. The fixation could be in many ways either it is complete or incomplete. An incomplete could be mesentery covering only the cystic duct and artery while the complete, could be either too long or wide mesentery[2].. A free-floating gallbladder can be found in anatomic variations discussed here[3] [5]. However, there could be another reason for example a previously normal mesentery in the elderly which goes through a relaxation and atrophy due to visceroptosis[4]. A provocative moment should happen for torsion. Studies show that such provocative moments happen when there are kyphoscoliosis, peristaltic movements which are forceful, adhesions, atherosclerosis of the cystic artery or sigmoid volvulus.

2. Case Report

50 years old Chinese gentleman, with no known medical illness, initially presented to HSA with complains of abdominal pain, more on right hypochondriac region for 2 days, associated with vomiting about 2-3 times per day. The patient had no complains of fever, constipation or diarrhea. A bedside ultrasound was done for the patient and it was documented as gallbladder stone with sludge. The investigation of the patient's blood showed result as such;WBC-11.5, Platlet-185, Amylase-132,ALP-52.

The patient was diagnosed having Cholelithiasis and was then given an appointment to the surgical department in two weeks and was subsequently discharged from the emergency dept. Due to persistent symptoms, he came to the clinic, and blood investigations along with USG was repeated. Blood investigations with almost similar findings, while US findings was reported as ' pericholecystic edema query cause' , and no calculus was seen. Then the decision was made for the patient to have Laparoscopic Cholecystectomy and consent was taken. Intra-operative findings showed a gangrenous GB, with minimal adhesions to liver and small bowel with a 360 degree rotation of cystic duct along with pedicle (countercheck wise).The gallbladder was derotated on its peritonealised mesentry axis, along with adhesiolysis, and cholecystectomy which were all performed laparoscopically. A vertically opened thick walled gall bladder measuring 90mm in length and 45mm in diameter cut surface showed a hemorrhagic mucosa. The wall was 4mm in thickness. And the representative section was submitted in a single block. Sections of gallbladder exhibited prominent mucosal and transmural hemorrhagic infarction. There was no evidence of dysplasia or invasive carcinoma but a significant infarction of gall bladder compatible with the history of torsion was present. Further post-operative investigation was not able to be recorded because patient requested to be transferred to Singapore after Post op Day 1.

3. Discussion

The torsion of gallbladder can happen either with a greater than 180-degree rotation that is known as a complete torsion or incompletely with a rotation of less than 180 degrees [2]. The patient is this case report had a complete torsion occluding both the bile and blood flows. The patient had intense peristalsis by the stomach and was implicated in clockwise rotation, while in counter clockwise rotation the transverse colon was implicated. The presence of bile stones in a gallbladder with signs of cholecystitis suggested that this patient had torsion of the gallbladder which was very rare in otherwise healthy patients.

4. Conclusion

The torsion of gallbladder has always been considered rare so often diagnosis is not or seldom made before a surgical

procedure. To overcome any medical issues, it has to be considered that signs of cholecystitis during radiologic and clinical signs in the patient can be due the torsion of the gallbladder

References

[1] Schroder DM, Cusumano DA., 3rd Laparoscopic cholecystectomy for gallbladder torsion. Surg Laparosc Endosc. 1995; 5:330–334.
[2] Vosswinkel JA, Colantonio AL. Torsion of the gallbladder: laparoscopic identification and treatment. Surg Endosc. 1999; 13:1154–1156.
[3] Losken A, Wilson BW, Sherman R. Torsion of the gallbladder: a case report and review of the literature. Am Surg. 1997;63:975–978.
[4] Nakao A, Matsuda T, Funabiki S, Mori T, Koguchi K, Iwado T, et al. Gallbladder torsion: case report and review of 245 cases reported in the Japanese literature. J Hepatobiliary Pancreat Surg. 1999;6:418–421.
[5] Lyons KP, Challa S, Abrahm D, Kennelly BM. Floating gallbladder: a questionable preclude to torsion: A case report. Clin Nucl Med. 2000;25:182–183.

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