

Case Report

Impacted Gallstone presenting as a Cecal Tumor

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Abstract: Gallstone ileus has been rarely reported and typically related to older age (>65years), the case described here is of biliary ileus in a 33years old patient. The right hemicolectomy specimen was sent for histopathology examination from Sheikh Khalifa Bin Zayed Hospital (SKBZH) after exploratory laparotomy. On opening, a pigmented stone of mulberry type measuring 3.2x2x1.3cm was found impacted at ileocecal junction on cecal side. Microscopic examination revealed intact mucosal lining with normal morphology and distribution of colonic glands. There was fibrosis in the wall of area surrounding the stone. Mild inflammation was present in the mucosa along with serosal congestion. Margins were healthy and no proof of carcinoid tumor or malignancy was appreciated. The case was traced retrospectively and patient was called to seek the formation of stone in this unusual place. Detailed history, examination was done and investigation reports were observed. A diagnosis of biliary ileus was made. It was concluded that large stone was formed as a consequence of accretion of multiple small stones dropped from gall bladder through a fistula. Furthermore, the small stones bound each other as a result of chemical reaction catalyzed by the enzymes of that region.

Keywords: Cecal tumor, biliary ileus, Gallstone, Cholecystitis, Cholecystocolonic fistula

Case Report

Biliary ileus is an exceedingly unusual cause of colonic obstruction. It occurs most frequently due to the passage of a single large stone or many tiny stones through a biliarycolic fistula into the colon. Late presentation and comorbid symptoms are the diagnostic challenges that result in high morbidity and mortality.

History

A 33-years male presented to hospital with one day history of pain in right iliac fossa and vomiting for 2-3 hours. History of present illness was relating back to epigastric pain on and off for 2-months. Clinical examination revealed a distended abdomen with right iliac fossa tenderness but no overt peritonism. Ultrasonography and X-ray abdomen did not help to reach a probable diagnosis. The exploratory laparotomy was done. Preoperatively a mass was identified in cecum. Right hemicolectomy performed and the specimen was sent to Azad Jammu & Kashmir medical college (AJKMC) Muzaffarabad. The patient was discharged after recovery.

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The specimen was opened and found to contain mulberry stone. It was unusual place of stone formation so

patient was traced and called to pathology laboratory of AJKMC. Detailed history and examination was done.

Gross description:

18x5x4cm right hemicolectomy segment with approximately 5 cm long terminal ileum segment was received in formalin. [Figure 1]. On opening there was an impacted mulberry type 3.2x2x1cm yellow stone at ileocecal junction at the ileocecal junction in the cecum; however the lumen appeared patent with surrounding fibrosis. No tumor was identified. Two small lymph nodes were also identified.

Microscopic examination:

Microscopic examination revealed intact mucosal lining with normal morphology and distribution of colonic glands. There was fibrosis in the wall in the sections taken from area surrounding the stone. Mild inflammation was present in the mucosa along with serosal congestion. Margins were healthy and lymph nodes exhibited reactive changes. No evidence of carcinoid tumor or malignancy was seen [Figure 3]

Discussion:

Biliary ileus is an exceptionally rare cause of intestinal obstruction. The incidence is reported as 1- 3% of all cases of intestinal obstruction¹. Usually it is a disease of older age with high morbidity and mortality. The ob-

struction usually involves a large gallstone entering the colon through a biliary fistula. The fistula is formed with a preceding multiple events of acute cholecystitis that result in inflammation and adhesion between the



Figure 1: Impacted gall stone in caecum



Figure 2: Multiple stones glued to each other

gallbladder and colon. The gallstone lodges distally and may trigger biliary ileus. The point of lodge may be a pathological contraction of the colon due to diverticular disease² or prior pelvic irradiation³. No such history was present in our case. The usual presentation of intestinal obstruction is with abdominal pain and distension. However, patient can also present with diarrhoea or ascending cholangitis⁴. Imaging techniques are usually helpful to reach a definite diagnosis along

with biochemical investigations. The gallstone ileus is an uncommon condition of patients after the sixth decade of life and should be suspected when these present with obstructive symptoms, regardless of gender. Pre-operative diagnosis is important for early and less traumatic surgical procedure⁵. Treatment should be focused on only management of intestinal obstruction.

Our case was interesting because of lack of complaint of cholecystitis which is usually considered prerequisite for the formation of fistula and transfer of stone from gall bladder to cecum. The lack of complaint may be due to high pain threshold or other subjective factors. As the condition was not suspected preoperatively, finding of a "tumor" with no frozen section facility available, segmental resection of colon was carried out. However conservative management is preferred. The bowel resection and end-to-end anastomosis is accepted in cases only where it is necessary but should be avoided to its utmost [6]. Terminal ileum is vital for vitamin B12 and bile acid absorption; hence removal of terminal ileum further predisposes such patients to bile stone formation in addition to megaloblastic anemia. The importance of frozen section and/or touch cytology during surgery in case of suspected tumor could not be overemphasized.

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