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XANTHOGRANULOMATOUS CHOLECYSTITIS MIMICKING CARCINOMA GALLBLADDER – A CASE REPORT

General Surgery

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ABSTRACT

Xanthogranulomatous cholecystitis (XGC) are benign chronic inflammatory disease of the gallbladder that often presents as cholecystitis and can mimic gallbladder carcinoma, distinguishing XGC from gall bladder carcinoma preoperatively is challenging. We are presenting a case of a 59-year-old female who presented with features of GB carcinoma as evident in the CECT abdomen. There was a mass in the gall bladder and extension into adjacent structures Involvement of the first part of the duodenum, Transverse colon, and pylorus of the stomach. Cholecystectomy, colocolic anastomosis, and patch repair of stomach, and liver margin resection done. The HPE report came out as XGC. The case aims to outline the clinical presentation of XGC and differentiate it from carcinoma gall bladder.

KEYWORDS

Xanthogranulomatous cholecystitis: Gall bladder carcinoma: Cholecystectomy

INTRODUCTION:

Xanthogranulomatous cholecystitis is a rare inflammatory disease of the gallbladder. It is characterized by abnormal wall thickening and severe proliferative fibrosis with the formation of multiple yellow-brown intramural nodules. The inflammatory process is often extensive and may extend to adjacent structures like the liver, duodenum, colon, stomach, and omentum mimicking malignancy.

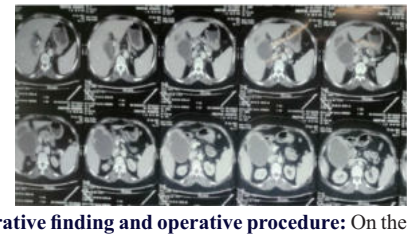
Although various invasive and noninvasive techniques have been reported, the definitive diagnosis depends on HPE examination. Especially in patients with severe proliferative fibrosis involving the GB and surrounding organs. Here we report a case of XGC presenting as GB CA

Case Report:

A 59-year-old female presented to our department with the complaint of non-radiating right upper quadrant pain on and off for 2 months. The patient was febrile throughout the illness. She had a history of non-bilious vomiting. There was no history of anorexia or weight loss. The abdominal examination was unremarkable except for mild tenderness over the right upper abdomen. Laboratory values were unremarkable. The normal tumor markers include CEA, CA 19.9.

A CECT scan of the abdomen was done, which revealed a distended GB with thickening in the region of the body with calculus in the neck of GB. Involvement of transverse colon, proximal duodenum with focal asymmetric thickening of the duodenum wall at the same level; feature suggestive of GB CA. The patient was planned for open extended cholecystectomy.

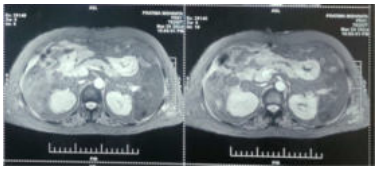
Pre-operative CT scan:



Intraoperative finding and operative procedure: On the opening of the abdomen a mass was identified on the fundus of the gallbladder which was densely adhered with the liver, duodenum, transverse colon, and pylorus. Open cholecystectomy with excision of liver margin done. Adhered part of transverse colon resected and colocolic anastomosis done (end to end). Infiltrated pylorus portion of stomach and duodenum repair with omental patch. Specimen sent for HPE.

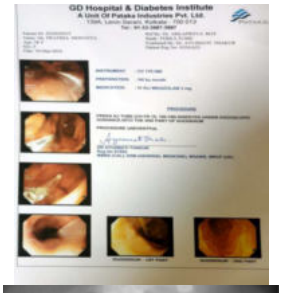
Post-operative complication and management.On the 5th postoperative day, there is an anastomotic leak. The patient has undergone exploratory laparotomy followed by anastomosis of the colon along with primary repair of the stomach wall and loop ileostomy.

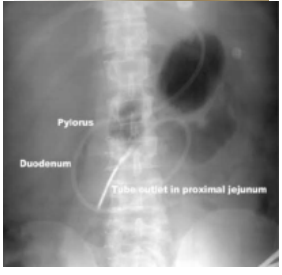
From the 7th post-operative day, the patient developed an enterocutaneous fistula. The patient managed conservatively for 2 weeks with TPN. The aim was to have a controlled fistula with improved nutrition. As a complication of TPN infusion patient developed hypernatremia and shifted to CCU for further management. The patient had to be ventilated. After extubation, the patient was moved to the surgical ward and allowed for oral uptake. After oral uptake fistula output was very high - (1000ml/day).



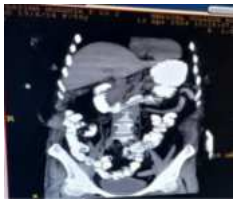
MR fistulogram – suggestive of a developing fistula

We planned for a nasojejunal tube insertion and it was done under endoscopic guidance.





The patient improved dramatically in the next 5 days and ultimately there was no discharge from the fistula site after the 5th day from the nasojejunal tube insertion.



Gastrograffin study without any peritoneal spillage.

We then discharged the patient. We take out the tube after 5 weeks from the insertion.

DISCUSSION:

Xanthogranulomatous cholecystitis is an uncommon variant of chronic cholecystitis characterized by the presence of greyish-yellow nodules or streaks in the gallbladder wall, mainly caused by lipid-laden macrophages [1]. Although well-defined pathologically, xanthogranulomatous cholecystitis remains difficult for the radiologist to recognize because some of the sonographic [2,3,4] and CT [5, 6] features of the disease are nonspecific, such as gallbladder wall thickening and calculi.

Epidemiology:

Xanthogranulomatous cholecystitis is seen predominantly in female patients aged 60-80 years old.

Associations:

A relationship with gallbladder carcinoma is uncertain [7, 8]

Clinical presentation:

Patients typically present with symptoms and signs similar to cholecystitis including right upper quadrant pain, vomiting, obstructive jaundice, and cholangitis, with a positive Murphy sign and a palpable mass. Leukocytosis is generally present [9].

Pathology:

The macroscopic appearance is of a poorly defined, nodular yellow mass that infiltrates the wall of the gallbladder. There is gallbladder wall thickening, and the process may infiltrate directly into the adjacent soft tissues, liver, duodenum, or colon [10].Histologically, it consists of a mixture of ceroid (wax-like) xanthogranuloma with foamy histiocytes, multinucleated foreign body giant cells, lymphocytes, and fibroblasts containing areas of necrosis.It is postulated that xanthogranulomatous cholecystitis results from rupture of occluded Rokitansky-Aschoff sinuses, with subsequent intramural extravasation of inspissated bile and mucin [9]. This further attracts histiocytes to phagocytize insoluble cholesterol.

Radiographic Features:

Ultrasound	CT
• Gallbladder wall thickening may be diffuse or focal • Intramural hypoechoic nodules or bands • If the inflammatory process has infiltrated the adjacent liver, there may be loss of the intervening fat plane, with focal hypoechogenicity of hepatic parenchyma • Gallstones often present	• 5-20 mm small intramural hypoattenuating nodules • Poor/heterogeneous contrast enhancement • Features of local infiltration, or other complications, such as perforation, abscess formation, or formation of fistulous tracts [1]

Treatment and prognosis:

Because of its imaging similarity to gallbladder carcinoma, cholecystectomy is often performed. Frozen section biopsy should be performed to exclude malignancy.

CONCLUSION:

Extensive involvement of multiple viscera such as the liver, transverse colon, and stomach in XGC is very uncommon. These features often mimic carcinoma of the gall bladder, which can only be differentiated after HPE. Radical resection along with resection of involved viscera often be tried whenever possible if doubt exists regarding the underlying gall bladder carcinoma.

REFERENCES:

1. Houston JP, Collins MC, Cameron I, et al. Xanthogranulomatous cholecystitis. *Br J Surg* 1994; 81:1030-1032
2. Lichtman JB, Varma VA. Ultrasound demonstration of xanthogranulomatous cholecystitis. *J Clin Ultrasound* 1987; 15:342-345
3. Casas D, Pérez-Andrés R, Jiménez JA, et al. Xanthogranulomatous cholecystitis: a radiological study of 12 cases and review of the literature. *Abdom Imaging* 1996; 21:456-460
4. Kim PN, Ha HK, Kim YH, et al. US findings of xanthogranulomatous cholecystitis. *Clin Radiol* 1998; 53:290-292
5. Cossi AF, Scholz FJ, Aretz T, et al. Computed tomography of xanthogranulomatous cholecystitis. *Gastrointest Radiol* 1987; 12:154-155
6. Chun KAC, Ha HK, Yu ES, et al. Xanthogranulomatous cholecystitis: CT features with emphasis on differentiation from gallbladder carcinoma. *Radiology* 1997; 203:93-97
7. Roberts KM, Parsons MA. Xanthogranulomatous cholecystitis: clinicopathological study of 13 cases. J. Clin. Pathol. 1987;40 (4): 412-7.
8. Dixit VK, Prakash A, Gupta A et-al. Xanthogranulomatous cholecystitis. Dig. Dis. Sci. 1998;43 (5): 940-2.
9. Duarte Z, Guevara U, Vuong PN. Ceroid granulomas of the gallbladder. A clinicopathologic study of nine cases. Arch. Anat. Cytol. Pathol. 1994;42 (1): 5-9.
10. Levy AD, Murakata LA, Abbott RM et-al. From the archives of the AFIP. Benign tumors and tumorlike lesions of the gallbladder and extrahepatic bile ducts: radiologic-pathologic correlation. Armed Forces Institute of Pathology. Radiographics. 22 (2): 387-413.