

## Xanthogranulomatous Cholecystitis - A Surgeons Dilemma and a Pathologists Pride: A Case Report

D.S. Nirhale, V.S. Athavale, Murtuza Calcutawala, Mohit Bhatia

\*Professor, Dept. Of General Surgery, Padmashree Dr. D. Y. Patil hospital & Research Centre, Pimpri, Pune-411018, Maharashtra.

\*\*Associate Professor, Dept. Of General Surgery, Padmashree Dr. D. Y. Patil hospital & Research Centre, Pimpri, Pune-411018, Maharashtra

\*\*\* Ass. Professor, Padmashree Dr. D. Y. Patil hospital & Research Centre, Pimpri, Pune-411018, Maharashtra.

\*\*\*\*PG Student, General Surgery Resident, Dept. of General Surgery, Padmashree Dr. D. Y. Patil hospital & Research Centre, Pimpri, Pune-411018, Maharashtra.

### Abstract

Xanthogranulomatous cholecystitis (XGC) is a rare type of gallbladder inflammation. Unlike other cholecystitis, it can be easily misdiagnosed as gallbladder cancer based on radiological images.[1] Xanthogranulomatous cholecystitis is a rare but severe form of cholecystitis. In this gall bladder is thickened and irregular with extension of yellow xanthogranulomatous inflammation to adjacent organs. It is extremely difficult to diagnose pre operatively as it macroscopically resembles carcinoma of gall bladder. We report an unusual case of xanthogranulomatous cholecystitis at our institute.

**Keywords:** Xanthomatosis;  
Xanthogranulomatous cholecystitis;  
Cholecystectomy.

### Case Report

A 45 year old female patient came with complaints of pain in right hypochondrium since 4 months. Pain was moderate to severe in intensity to begin with but gradually increased and was associated with epigastric fullness and occasional episodes of non bilious vomiting. Patient had no episodes of jaundice

or fever. Ultrasound of abdomen and pelvis revealed thickened gall bladder wall (4 mm) with multiple calculi largest measuring 12x6mm and one calculi in neck region, with Common bile duct having normal calibre with no dilatation of biliary tree. Patient underwent open cholecystectomy and intraoperative period went uneventful however there were adhesions intraoperatively. Patient developed wound infection for which she was subjected to econdary suturing. Histopathology examination of the specimen revealed distended gall bladder with dense histiocytic proliferation upto the serosa along with dilated and congested blood vessels and admixed chronic inflammatory infiltrates thereby suggesting xanthomatous cholecystitis with cholelithiasis.

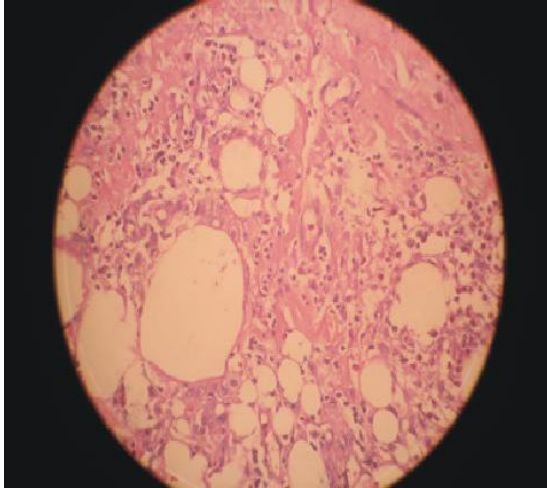
### Discussion

X GC, named by McCoy in 1976, is a rare condition of gall bladder inflammation, representing about 1.5% of all cholecystitis cases.[2] The mechanism of its formation is thought to be an initial acute inflammatory process followed by a granulomatous reaction. It is easily misdiagnosed as gall bladder carcinoma due to presence of gall bladder wall thickening, which is one of the main symptoms of gall bladder cancer as seen radiologically and macroscopically. It is characterised by a

---

**Corresponding Author:** Dr. Mohit Bhatia, MBBS, MS, PG Student, General Surgery Resident, Dept. of General Surgery, Padmashree Dr. D. Y. Patil hospital & Research Centre, Pimpri, Pune-411018, Maharashtra.

E-mail: drbhatia1985@gmail.com



focal or diffuse destructive inflammatory process, with varying proportions of fibrous tissue, acute and chronic inflammatory cells and lipid laden macrophages. Surgery is likely to be difficult owing to dense fibrous adhesions and adherence of gall bladder to adjacent structures. Its complications includes gall bladder perforation, biliary obstruction, cholangitis and fistula formation.[3] It was first described in 1970, since then over 60 case have been reported under a variety of synonyms, including ceroid, ceroid like histiocytic granuloma of gall bladder. Increasing recognition and reporting of XGC should indicate the true incidence of this condition.[4]

## Conclusion

It is an uncommon variant of cholecystitis that is rarely diagnosed pre-operatively. Although imaging modalities like CT Scan, ultrasonography aid in diagnosing the complications pre-operatively, only histopathological examination of the specimen will accurately give diagnosis of Xanthogranulomatous cholecystitis.

## References

1. Guzman-Valdivia G. Xanthogranulomatous cholecystitis: 15 years experience. *World J Surg.* 2004; 28: 254-257.
2. McCoy JJ Jr, Vila R, Petrossian G, McCall RA, Reddy KS. Xanthogranulomatous cholecystitis. Report of two cases. *J S C Med Assoc.* 1976; 72: 78-79.
3. Reed A, Ryan C, Schwartz S. Xanthogranulomatous cholecystitis. *J Am Coll Surg.* 1994; 179: 249-252.
4. Yoshida J, Chijiwa K, Shimura H, *et al.* Xanthogranulomatous cholecystitis versus gall bladder cancer. Clinical differentiating factors. *Am Surg.* 1997; 63: 367-371.