

CASE REPORT

Porcelain Gall Bladder: A Rare Surgical Entity

Vishal Sardesai^{1*}, Hardik Shah², Dharmesh Panchal³^{1,2,3}rd years DNB, Department of General surgery, ³MS General, Department of General surgery Holy spirit hospital, Mahakali Caves Road, Andheri east, Mumbai**ABSTRACT**

BACKGROUND: Porcelain gallbladder is an uncommon manifestation of chronic cholecystitis, characterized by intramural calcification of the gallbladder wall.¹ The term "porcelain gallbladder" is used to describe the bluish discoloration and brittle consistency of the gallbladder wall seen in this condition.² The diagnosis is usually suggested by an abdominal radiograph revealing an incidental calcified lesion in the region of the gallbladder. Patients with a porcelain gallbladder are often asymptomatic, but are at increased risk for the development of gallbladder carcinoma, which has a poor prognosis.² Thus, the possibility of a porcelain gallbladder should always be considered in the differential diagnosis of calcified right upper quadrant abdominal lesions. The incidence of a calcified gallbladder at autopsy ranges from 0.06 to 0.08 percent.³ It is more common in females than in males, with a ratio of 5:1.⁴ The mean age at presentation varies from 38 to 70 years.⁴ The risk of gallbladder cancer in patients with porcelain gallbladder is unclear, with reported rates ranging from 0 to 62 percent.^{2,3,5-8}

Key Word: x-ray abdomen, Intra-op view of porcelain gall bladder, Specimen of Porcelain Gall Bladder

CASE REPORT

A 73 year old female presented to OPD with complaints of abdominal pain over right hypochondrium and radiating to back on and off since 1 month. Patient also complained of nausea and bloating sensation over abdomen after meals. Patient did not give any history of fever or jaundice. Patient was a known case of rheumatic heart disease with mitral stenosis with hypertension on regular medications. Patient also gave history of old cerebrovascular accident with right hemiplegia 25 years ago. But currently does not have any residual neurological deficit. On examination patient had tenderness over right hypochondrium, but no guarding or rigidity was present. Patient was advised admission. On investigation patient was found to be having a calcified lesion in right lumbar region on x-ray

abdomen and on sonography showed calcified gall bladder suggestive of porcelain gallbladder. Liver function tests and other routine investigations were normal except echocardiography was suggestive of moderate degree of rheumatic calcified mitral valve stenosis with mild degree of pulmonary hypertension. Patient was advised for open cholecystectomy in view of co-morbidities. Patient underwent open cholecystectomy and specimen was sent for histopathology. Intra-op and post-op period was uneventful. Histopathology report was suggestive of porcelain gallbladder with no evidence of malignancy.

DISCUSSION

Porcelain gallbladder is a calcification of the gallbladder believed to be brought on by excessive gallstones, although the exact cause is not clear. As with gallstone disease in general, this condition occurs predominantly in overweight female patients of middle age. It is a morphological variant of chronic cholecystitis. Inflammatory scarring of the wall, combined with dystrophic calcification within the wall transforms the gallbladder into a porcelain-like vessel. Removal of the gallbladder

***Corresponding Author:**

Dr Vishal .R. Sardesai
Jeevan data hostel,
Holy spirit hospital,
Mahakali caves road,
Andheri east,
Mumbai 400093
Contact No: 9657041523
Email: vishal.sardesai@gmail.com

(cholecystectomy) is the recommended treatment. Porcelain gallbladder is an uncommon condition; recognizing the clinical and imaging characteristics of the disease is important because of the high frequency (22%) of adenocarcinoma in porcelain gallbladder.⁹ Nonetheless, the causal relationship between porcelain gallbladder and malignancy has not been established. Surgery should not be delayed even if the patient is asymptomatic, because the occurrence of carcinoma in porcelain gallbladder is remarkably high.¹⁰

Figure 1: x-ray abdomen showing calcified mass in right lumbar region



Figure 2: Intra-op view of porcelain gall bladder

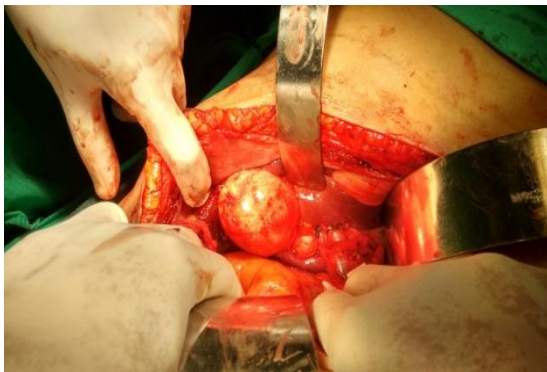


Figure 3: Specimen of Porcelain Gall Bladder



CONCLUSION

Patient diagnosed with porcelain gallbladder should undergo cholecystectomy at the earliest due to high risk of gallbladder malignancy associated with porcelain gallbladder.

REFERENCES

1. OCHSNER SF, CARRERA GM. Calcification of the gallbladder ("porcelain gallbladder"). *Am J Roentgenol Radium Ther Nucl Med* 1963; 89:847.
2. Berk RN, Armbuster TG, Saltzstein SL. Carcinoma in the porcelain gallbladder. *Radiology* 1973; 106:29.
3. Kane RA, Jacobs R, Katz J, Costello P. Porcelain gallbladder: ultrasound and CT appearance. *Radiology* 1984; 152:137.
4. CORNELL CM, CLARKE R. Vicarious calcification involving the gallbladder. *Ann Surg* 1959; 149:267.
5. Polk HC Jr. Carcinoma and the calcified gall bladder. *Gastroenterology* 1966; 50:582.
6. Stephen AE, Berger DL. Carcinoma in the porcelain gallbladder: a relationship revisited. *Surgery* 2001; 129:699.