



## RESEARCH ARTICLE

### INCIDENCE OF GALL BLADDER CARCINOMA IN RADIOLOGICALLY UNDIAGNOSED PATIENTS UNDERWENT LAP/OPEN CHOLECYSTECTOMY FOR CHOLELITHIASIS

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#### ABSTRACT

**Background:** Gall bladder carcinoma is the most common biliary epithelial neoplasm. Its slowly progression and late presentation lend it a poor prognosis. Various risk factors can be divided into cholelithiasis, inflammatory cause's infection and gall bladder pathologies among in all these cholelithiasis is most common problem with which pt presents in surgery opd. In this retrograde observational study we look for the incidence of gall bladder carcinoma in daily routine surgery lap/open cholecystectomy for choledithiasis. **Materials and methods:** we analysed the medical records of patients with symptomatic gall stone disease who underwent lap/open cholecystectomy at Sharda hospital. **Results:** A total of 356 lap/open cholecystectomies performed in our institute in period of one year and eight pt diagnosed with incidental gall bladder carcinoma. **Conclusion:** Cholecystectomy which is performed for benign gall bladder disease rarely results in diagnosis of gall bladder carcinoma hence the microscopic examination of each specimen and follow up of patient is important.

#### INTRODUCTION

Laparoscopic cholecystectomy (LC) has been the gold standard treatment for gallstone disease for over two decades. LC performed for gallstone disease may rarely result in a diagnosis of unexpected gall bladder cancer<sup>[1,2]</sup>. Gall bladder carcinoma (GBC) ranks fifth among the gastrointestinal carcinomas and is the most common cancer of the biliary tract.<sup>[3]</sup> According to the Indian cancer registry data, incidence of GBC is 0.8%–1%. While New Delhi and Bhopal are the leading states, lowest incidence is seen in Chennai.<sup>[4]</sup> The overall incidence of Gall bladder Carcinoma is 2.5-3 per 100,000 people<sup>[3,4,6]</sup>. The most important curative treatment for Gall bladder Carcinoma is surgical resection; the curative efficacy of both radiation therapy and systemic chemotherapy are still uncertain<sup>[6,7]</sup>. The 5-year survival rate for all stages of Gall bladder carcinoma is 2.7-15%<sup>[8,9]</sup>. Risk factors include cholelithiasis, calcified gallbladder wall, adenomatous polyp, obesity, estrogen, choledochal cyst, and chemical carcinogens. Of these, gallstones are a well-established risk factor associated with the development of Gall bladder Carcinoma in 75%–90% of cases<sup>[5]</sup>.

**Aim:** To determine the incidence of CA gall bladder in patient of Cholelithiasis.

#### MATERIALS AND METHODS

The medical records of the patients with symptomatic gallstone disease and acute or chronic cholecystitis who underwent

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Cholecystectomy at Sharda Hospital from July 2021 to July 2022 were assessed. A total of 356 cholecystectomy were performed at our institute during this period. The data on the age, sex and the presenting clinical features of all these cases were retrieved. The clinical presentation, pre-operative imaging, intraoperative findings and the histological features were analyzed and the results were compared with those in the literature.

#### RESULTS

Eight patients of GB carcinoma were identified from the 356 who underwent cholecystectomy during the study period. Four patients had uneventful laparoscopic cholecystectomy. One patient diagnosed as perforated gall bladder preoperatively, underwent open emergency cholecystectomy. One patient had lap converted to open due to adhesions. Two had lap converted to open and a bail out procedure was performed for the same. Five diagnosed with adenocarcinoma and Two diagnosed with mucinous carcinoma on HPE and on follow up one pt presented as port site metastasis.

#### DISCUSSION

Although there is narrow band for patients of Cholelithiasis with incidental Gall bladder carcinoma but in high volume center incidence is more significant. The prognosis is usually dismal and the 5 year survival rates have been reported to be less than 5 year for the more advanced stages<sup>[10]</sup>. The countries with a high incidence of gallbladder cancer include Chile, Poland, India and Japan. A very high incidence of this cancer has been reported among women in northern India (21.5/100,000) and among female Native American Indians (14.5/100,000)<sup>[11]</sup>.

A review of the literature showed that 0.19% to 3.3% of the patients who underwent cholecystectomies for presumed benign diseases were found to have carcinomas of the gallbladder [1-5] Tantia et al., in a study of Laparoscopic cholecystectomy cases from the Indian metropolis of Kolkata, reported an incidence of 0.59% of Incidental gall bladder carcinoma [12]. The study in New Delhi, India showed an incidence of 0.96% of Incidental gall bladder carcinoma among Laparoscopic cholecystectomy cases over a five and a half year period [13]. In current Retrospective observational study the incidence of Incidental Gall bladder carcinoma is 2.24%. Out of which the incidence of adenocarcinoma is 1.4% in overall study [11]. Although the survival rate in Gall bladder carcinoma is less than 5 years [8] despite of doing the complete or partial cholecystectomy the survival rate is same.

## CONCLUSION

Gallbladder carcinoma is one of the commonest cancers in North India. With easy availability of radiological investigation more patients of cholelithiasis are diagnosed and Laparoscopic cholecystectomy has become the commonest procedure performed world wide, and hence the increased incidence of incidentally diagnosed cancers. A difficult gallbladder at surgery usually raises the suspicion of cancer. Findings at surgery such as dense adhesions of the organs which are adjacent to the gallbladder and a difficult dissection of the gallbladder from the liver bed are all pointers to the presence of a possible malignancy.

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