ABSTRACT

The gall bladder is one of the most commonly resected organs. The number of cholecystectomies has increased by more than 50% in the last decade. Gallbladder disease is a term for several types of conditions that can affect the gallbladder, the majority being caused by inflammation. A gallbladder with stone frequently leads to cholecystitis.

Objectives: The aim of the present study is to study the magnitude of lesions in the gallbladder, to study different types of histopathological lesions occurring in the gallbladder and to correlate them clinicopathologically.

Methods: We reviewed cholecystectomy cases performed for benign diseases of the gallbladder from June 2017 to May 2019 by investigating pathological specimens of the gallbladder. We evaluated demographical properties, clinical features and their association with the pathological diagnosis.

Results: Variety of lesions can be found if cholecystectomy specimens were examined meticulously. Patients usually present with vague complaints like pain in abdomen, nausea, dyspepsia. Most common pathology noted in our study was chronic cholecystitis. Other benign lesions were cholesterosis and acute cholecystitis. Various other associated lesions and variants of cholecystitis were also encountered.

Conclusion: Diagnosis was established on histopathology. Hence histopathology remains gold standard for revealing unsuspected lesions.

KEYWORDS
gall bladder disease, cholecystectomy, histopathology.
Female preponderance was found in this study. Ratio of male to female cases was 1:1.7 (MALES-61 & FEMALES-104)

3) CLINICAL PRESENTATION OF PATIENTS WITH GALLBLADDER LESION

<table>
<thead>
<tr>
<th>SYMPTOMS &amp; SIGNS</th>
<th>NO. OF PATIENTS</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAIN ABDOMEN and DYSEPSIA</td>
<td>162</td>
<td>98.93%</td>
</tr>
<tr>
<td>VOMITINGS</td>
<td>39</td>
<td>23.93%</td>
</tr>
<tr>
<td>FEVER</td>
<td>24</td>
<td>14.78%</td>
</tr>
<tr>
<td>JAUNDICE</td>
<td>13</td>
<td>7.87%</td>
</tr>
<tr>
<td>OTHERS</td>
<td>08</td>
<td>4.84%</td>
</tr>
</tbody>
</table>

4) VARIOUS HISTOPATHOLOGICAL FINDINGS

<table>
<thead>
<tr>
<th>HISTOPATHOLOGY FINDING</th>
<th>NO. OF PERSONS</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHRONIC CALCULOUS CHOLECYSTITIS</td>
<td>92</td>
<td>55.75%</td>
</tr>
<tr>
<td>CHRONIC ACALCULOUS CHOLECYSTITIS</td>
<td>35</td>
<td>21.21%</td>
</tr>
<tr>
<td>CHRONIC CHOLECYSTITIS WITH CHOLESTEROSIS</td>
<td>25</td>
<td>15.51%</td>
</tr>
<tr>
<td>ACUTE ON CHRONIC CHOLECYSTITIS</td>
<td>5</td>
<td>3.03%</td>
</tr>
<tr>
<td>XANTHOGANULOMA CHOLECYSTITIS</td>
<td>4</td>
<td>2.42%</td>
</tr>
<tr>
<td>ACUTE CHOLECYSTITIS</td>
<td>2</td>
<td>1.21%</td>
</tr>
<tr>
<td>ADENOMYOMA</td>
<td>1</td>
<td>0.60%</td>
</tr>
<tr>
<td>PAPILLARY ADENOCARCINOMA</td>
<td>1</td>
<td>0.60%</td>
</tr>
</tbody>
</table>

Various histopathological lesions:

**Acute cholecystitis:** The incidence of acute cholecystitis was 2(1.21%) cases out of 165 cases.

**Chronic cholecystitis:** Chronic cholecystitis was the commonest lesion found in our study i.e. 152 of 165 cases. Maximum cases belonged to age group of 41-50 years. Of the total cases of chronic cholecystitis, 92 cases were associated with calculi, 35 were acalculous and 25 cases were associated with cholesterolosis.

**Xanthogranulomatous cholecystitis:** The incidence of xanthogranulomatous cholecystitis found in our study was 4(2.42%) cases out of 165 cases.

**Polyps in gallbladder:** We in our study found 1 case of polypoidal lesion of which was of adenomyoma. Incidence of polypoidal lesions in our study was 0.60%.

**Malignancy in gallbladder:** We in our study found 1 case of malignant lesion of which was of papillary adenocarcinoma. Incidence of malignant lesions in our study was 0.60%.

DISCUSSION

Gallstone disease causing cholecystitis is the most common surgical disorder requiring cholecystectomy. The estimated prevalence of the disease in India is reported to be between 2 and 29% with the disease being 7 times more common in the North than in South India.

The present study was carried out on 165 cholecystectomy specimens to determine the histopathological spectrum of gallbladder diseases.

Histopathology not only establishes a tissue diagnosis in gallstone disease, but also contributes towards understanding its etiopathogenesis and can help in planning future treatment modality.

In our study, the age of the patients ranged from 13 to 85 years. Maximum number of patients was in the 4th & 5th decades of their life. Male to female ratio is 1:1.7 which is consistent with Pal et al., Mohan et al., and Mazlum M et al.

Female sex hormones and sedentary habits of most women in India expose them to factors that possibly promote the formation of gallstones.

Acute cholecystitis was seen in 1.21% of patients. Our findings are slightly less when compared to findings of study by Pavlidis T et al. Cholesterosis was the most common change noticed in our study (15.24%). Our results are in conformity with the findings of Mohan et al.

Xanthogranulomatous cholecystitis was reported in 4 cases (2.43%). Importance of recognizing this variant lies in the fact that they usually present with increased wall thickness and can mimic carcinoma on gross examination. Our incidence was almost similar to Mohan et al.

Chronic inflammation, infection, and stones are currently believed to be the causes of malignant conversion in gallbladder epithelia.

Various studies have long been reporting the association between gallbladder cancer, and the chronic inflammation caused by gallstones. Gallstones are detected in 54–97% of gallbladder cancer cases.

Prolonged chronic inflammation caused by gallstones should be taken into account for this association.

Nonetheless, inflammation at the gallbladder wall is usually not a specific sign as it can also be seen in inflammatory diseases. With 92.3% frequency, chronic cholecystitis is the most common pathology among the diseases associated with unexpected gallbladder cancer.

The histopathological examination of specimens that are removed due to diseases of gallbladder as clinically considered benign or not has been a subject of debate.

In India and other developed countries, there are diverse reports about the usefulness of this practice because the number of incidentally detected cancer cases is not so high.

In countries where the prevalence is high, it is advised to send the specimens to pathology, because it is only possible to detect the disease at its treatable early stage via histopathological examination.

Selective pathology is defined as the macroscopic evaluation of the gallbladder during the operation, and it has been on the front for a couple of years.

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CONCLUSION
Thus, we conclude that
• Variety of lesions can be found if cholecystectomy specimens were examined meticulously.
• Patients usually present with signs and symptoms of long duration and with vague complaints like pain in abdomen, nausea, dyspepsia.
• Most of the cases seen were of chronic calculus cholecystitis.
• These cases were predominant in females.
• Early stages of carcinoma gallbladder were missed on clinical examination and ultrasonography. Diagnosis was established on histopathology.
• A thorough examination of each and every cholecystectomy specimen is a must, especially to rule out carcinoma which can prove fatal for the patient.

REFERENCES