

# A study of various treatment modalities used for managing gallbladder lump

Tridip Dutta Baruah

Assistant Professor, Department of General Surgery, Mahatma Gandhi Medical College and Research Institute, Pillayarkuppam, Puducherry.  
Email: [tridipduttabaruah@gmail.com](mailto:tridipduttabaruah@gmail.com)

## Abstract

The term polypoid lesions of the gallbladder represents a wide spectrum of findings. Gallbladder polyps are classified as benign or malignant. Benign GPs are subdivided into: Pseudo-tumors (cholesterol polyps, inflammatory polyps; cholesterosis and hyperplasia), epithelial tumors (adenomas) and mesenchymatous tumors (fibroma, lipoma, and hemangioma). Malignant GPs are gallbladder carcinomas. The poor prognosis of gallbladder carcinoma patients means it is important to differentiate between benign polyps and malignant or premalignant polyps. **Aims and Objectives:** To study the various clinical features and treatment modalities used for the treatment of Gall Bladder lump. **Methodology:** All cases presented with gall bladder lump over 24 months period were included in this prospective study. Out of 149 cases, 56 were included in this study. **Result:** Pain was the commonest symptom other symptoms were Anorexia, Nausea, Jaundice Fever and weight loss. In physical appearances size more than 5cm well defined, soft and mobile were the features of benign and acute presentations of lump while in malignant cases features were ill defined, hard, fixed and moderate to severe pain. **Conclusion:** All the clinical features should be considered while treating the cases of gall bladder lump.

**Keyword:** Gall Bladder Lump, Malignant Gall Bladder Lump.

## \*Address for Correspondence:

Dr. Tridip Dutta Baruah, Assistant Professor, Department of General Surgery, Mahatma Gandhi Medical College and Research Institute, Pillayarkuppam, Puducherry, INDIA. 607402.

Email: [tridipduttabaruah@gmail.com](mailto:tridipduttabaruah@gmail.com)

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## INTRODUCTION

The term polypoid lesions of the gallbladder represents a wide spectrum of findings. Gallbladder polyps are classified as benign or malignant. Benign GPs are subdivided into: pseudotumors (cholesterol polyps, inflammatory polyps; cholesterosis and hyperplasia), epithelial tumors (adenomas) and mesenchymatous tumors (fibroma, lipoma, and hemangioma). Malignant GPs are gallbladder carcinomas. The poor prognosis of gallbladder carcinoma patients means it is important to differentiate between benign polyps and malignant or premalignant polyps<sup>1</sup>. More than 98% of all gallbladder and biliary track disorders are one way or another

connected to cholelithiasis, and calculus diseases constitutes most of the cases that seek surgical attention. It may present as acute chole-cystitis which many progress to empyema, chronic calculus cholecystitis or mucocel. Carcinoma of the gallbladder (GBC), although it has a low overall prevalence, is the most common cancer of the biliary tree and one of the most highly malignant tumors with poor prognosis<sup>2</sup>. Gallbladder carcinoma is two to six times more common in women than men. Incidence increases with age and more than 75% of patients with this malignancy are older than 65 years. GBC is more common in Caucasians than in blacks and there is some evidence that the incidence is increasing in younger individuals<sup>2</sup>. The incidence of GBC parallels the prevalence of gallstone disease; large and longstanding gallstones being associated with a higher risk of GBC. The risk of GBC in patients with gallstones has been reported to have increased four to seven times, the etiology of gallbladder cancer has been a source of speculation, the incidence of GBC parallels the prevalence of gallstone disease; large and longstanding gallstones being associated with a higher risk of GBC<sup>3</sup>. Gallstones constitute a significant health problem in developed societies, affecting 10% to 15% of the adult

population, meaning 20 to 25 million Americans have (or will have) gall-stones<sup>3,4,5,6</sup>. White Americans have an overall prevalence of 16.6% in women and 8.6% in men.<sup>7,8</sup> Intermediate prevalence rates occur in Asian populations<sup>10,11</sup> and Black Americans (13.9% of women; 5.3% of men).<sup>7</sup>The lowest frequencies occur in sub-Saharan Black Africans (<5%).<sup>11</sup>

### AIMS AND OBJECTIVES

To study the various clinical features and treatment modalities used for the treatment of Gall Bladder lump.

### MATERIAL AND METHODS

All cases presented with gall bladder lump over 24months period were included in this prospective study. All cases had histological proven diagnosis. Diagnostic modalities were clinical followed by imaging with Contrast Enhanced Computerized Tomography/Ultrasound/image guided biopsy and or laparotomy.Out of 149 cases, 56 were included in this study.

### RESULTS

**Table 1: Symptomology-disease specific distribution**

Symptoms	Acute	Chronic	Malignant	Total
Pain Mild	0	15	2	17
Moderate	16	7	2	25
Severe	13	0	0	13
Anorexia	20	6	4	30
Nausea	7	0	1	8
Vomiting	6	0	0	6
Jaundice	0	1	4	5
Fever	11	1	0	12
Weight Loss	6	3	4	13

Pain was the commonest symptom and it was present in 98.21%In the acute group, 44.82% pain was severe and moderate in 55.17% pain was mild chronic cases i. e. 65.21% and 30.43% had moderate pain. in the malignant pain was mild in 50% and moderate in 50%. Only in 24.13% described the pain acute cholecystitis as colicky and in the malignant group 75% of the cases had constant pain. Loss of appetite was seen in 68.96% of the acute group, in 26.08% of the chronic group and 100% of the malignant group. Vomiting and nausea were seen in 24.13% and 20.68% of the acute group, Fever was seen in 37.93% patient of the acute group and only in one case in the chronic group. Weight loss was complained by 2 cases in the acute group, one case in the chronic group and 3 case in the malignant group had the history of loss of weight. Jaundice was seen as presenting sign in 5 cases (8.9%),1 in the chronic group and all the 4 in the malignant group.

**Table 2: Showing the features of the Gallbladder lumps**

Features of the Gallbladder lumps		acute	chronic	Malignant
size	5 cms or less	4	10	0
	More than 5 cms	25	13	4
shape	ill-defined	17	0	0
	Well-defined smooth	12	23	0
	well-defined irregular	0	0	4
	cystic	4	8	0
Cons	Soft to firm	25	15	0
	Hard Mobile	0	0	4
Mobility	Limited/fixd	4	23	0
	mild	17	0	4
Tendernes	Moderate	0	15	2
	severe	16	7	2
<b>Total cases</b>		<b>29</b>	<b>23</b>	<b>4</b>

The physical characteristics of the gallbladder lump were evaluated. In the acute group, 86.20% of the lumps were more than 5 cms and only four were less than 5 cms. 41.37% are mobile and well-defined while 58.62% are ill-defined relatively fixed. Only 13.79% of the lumps were cystic. Tenderness was moderate in 55.17% and severe in 44.82% of patient with acute cholecystitis. In the chronic group, 56.52% of the gallbladder lumps exceeded 5 cms, the largest being a mucocele that extended up to 10 cms below the right costal margin. All of the lumps were well-defined and mobile. The consistency in those cases was cystic 34.78% and firm in 65.21% .about 65.21% had mild tenderness and about 34.78% had moderate tenderness. In the malignant group, all the lumps measured more than 5 cms. All of them were well-defined and irregular, all were hard in consistency and were fixed. Tenderness was mild in 50% and moderate in the test 50% of the cases

**Table 3: Treatment options available in this study**

Treatment option	Acute	Chronic	malignant
Conservative	27	0	0
Cholecystectomy	1	23	0
Subtotal cholecystectomy	1	0	0
Palliative Bypass	0	0	0
chemotherapy	0	0	0

In case with acute gallbladder disease all cases were treated conservatively and monitored in the wards. 2 cases of empyema cholecystectomy in one a subtotal cholecystomy in the other were performed .In the chronic group, all cases treated by elective cholecystectomy. Only in 3 cases infection was seen. The average hospital stay of the chronic group was 6.78 days. All the 4 cases presentede with obstructive jaundice and in those a

palliative segment III hepaticojejunostomy and chemotherapy was the only treatment that was possible.

## DISCUSSION

**Table 1:** Pain was the commonest symptom and it was present in 98.21% of the patients. It was only in one patient with gall bladder mucocele that symptom was absent. In the acute group, 44.82% of the patients described the pain as severe and moderate in 55.17% pain was mild in most of the chronic cases i. e. 65.21% and 30.43% had moderate pain. In the malignant pain was mild in 50% and moderate in 50%. Only in 24.135 described the pain acute cholecystitis as colicky and in the malignant group 75% of the cases had constant pain. In this series loss of appetite was seen in 68.96% of the acute group, in 26.08% of the chronic group and 100% of the malignant group. Vomiting and nausea were seen in 24.13% and 20.68% of the acute group, none in the chronic group and case of the malignant group had only nausea. Fever was seen in 37.93% patient of the acute group and only in one case in the chronic group and only in one case in the malignant group. Weight loss was complained by 2 cases in the acute group, one case in the chronic group and 3 case in the malignant group had the history of loss of weight. Jaundice was seen as presenting sign in 5 cases (8.9%), 1 in the chronic group and all the 4 in the malignant group these findings are similar to Nissar Hussain (2012)<sup>12</sup> Shukla VK (1985)<sup>13</sup>. Table 2: The physical characteristics of the gallbladder lump were evaluated under several heading and correlated with other features of the clinical presentation in each case. Size was estimated first by palpation and then measured with a measuring tape in two longest dimension. Shape was recorded as either well-defined smooth rounded, well-defined irregular or ill-defined. Consistency was recorded as cystic, soft firm or hard. Tenderness and mobility were also noted. In the acute group, 86.20% of the lumps were more than 5 cms and only four were less than 5 cms. 41.37% are mobile and well-defined while 58.62% are ill-defined relatively fixed. Only 13.79% of the lumps were cystic. Tenderness was moderate in 55.17% and severe in 44.82% of patient with acute cholecystitis. In the chronic group, 56.52% of the gallbladder lumps exceeded 5 cms, the largest being a mucocele that extended up to 10 cms below the right costal margin. All of the lumps were well-defined and mobile. The consistency in those cases was cystic 34.78% and firm in 65.21%. About 65.21% had mild tenderness and about 34.78% had moderate tenderness. In the malignant group, all the lumps measured more than 5 cms. all of them were well-defined and irregular, all were hard in consistency and were fixed. Tenderness was mild in 50% and moderate in the rest 50% of the cases **Table 3:** In case with acute gallbladder disease all cases were treated conservatively and

monitored in the wards. By the time of discharge 93.10% of the lumps of the Acute cases have regressed and they were operated after 6 to 8 weeks. However in 2 cases of empyema of the gallbladder there was no reduction in the size of the lump instead in these 2 cases the size increased. In these two cases conservative treatment was abandoned, cholecystectomy in one a subtotal cholecystectomy in the other were performed due to lot of adhesions. In the chronic group, all cases treated by elective cholecystectomy. Laparotomy findings were compared with the clinical findings. The contents of the distended gallbladder were clear mucoid fluid in the mucocoeles of the gallbladder. The pus was sent for culture and sensitivity but came out to be sterile. Post-operative recovery was uneventful in most the cases. Only in 3 cases infection was seen. The average hospital stay of the chronic group was 6.78 days. All the 4 cases presented with obstructive jaundice and in those a palliative segment III hepaticojejunostomy and chemotherapy was the only treatment that was possible. The regimen followed in our institution is a three drug combination with 5 fluorouracil, adriamycin and mitomycin-c given in 21 days cycle for six such cycles. Out of 4 patients 1 left against medical advice and the three took their patients to...Centre which is better equipped for oncology. The average hospital stay of the cases were 3 days.

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