

A study of various treatment modalities used for managing gallbladder lump

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Abstract

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: 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 presenting with gall bladder disease in 12 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.

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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

pre-malignant polyps¹. 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 mucocele. 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 prognosis². 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 individuals². 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 GBC³. 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^{3,4,5,6}. White Americans have an overall prevalence of 16.6% in women and 8.6% in men.^{7,8} Intermediate prevalence rates occur in Asian populations^{10,11} and Black Americans (13.9% of women; 5.3% of men).⁷ The lowest frequencies occur in sub-Saharan Black Africans (<5%).¹¹

AIMS AND OBJECTIVE

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

MATERIAL AND METHODS

All cases presenting with gall bladder disease over the period of 12months from 30 June 2007 till 29 June 2008 in the Surgery Outpatient Department and Casualty at Gauhati Medical College and Hospital, Guwahati were included in this prospective study. Out of 149 cases, 56 were included in this study. All cases had clinically evident diagonistically proven lump. 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.

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
	ill-defined	17	0	0
Shape	Well-defined smooth	12	23	0
	well-defined irregular	0	0	4
	cystic	4	8	0
Cons		25	15	0
	Soft to firm	0	0	4
	Hard Mobile	4	23	0
Mobility	Limited/fixed	17	0	4
	mild	0	15	2
Tendernes	Moderate	16	7	2
	severe	13	0	0
Total cases		29	23	4

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 and 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 in 34.78% and firm in 65.21% and 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 irregula, 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 actute gallbladder disease all cases were treated conservatively and monitored in the wards. In 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 of Carcinoma Gall bladder presented with obstructive jaundice and hence 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. In one patient with gall bladder mucocele pain 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% whereas 30.43% had moderate pain. In the malignant group 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 dull aching pain. In this series loss of appetite was seen in 68.96% in 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% in the acute group, none in the chronic group and the cases 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. Weight loss was complained by 2 cases in the acute group, one case in the chronic group and 3 case in the malignant group. 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)¹² Shukla VK (1985)¹³. 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 were 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 Table3: In 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 and subtotal cholecystomy in the other was performed. In the chronic group, all cases treated by elective cholecystectomy. Laparotomy finding were compared with the clinical findings. The contents of the distended gallbladder were clear mucoid fluid in the mucocoeles of the gallbladder. The pus in empyema were 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 of carcinoma gallbladder presented with obstructive jaundice and hence only palliative segment III hepaticojejunostomy and chemotherapy was the only treatment that was possible. Surgical palliation offered in all obstructive jaundice cases but out of 4 patients 1 left against medical advice and the three took their patients to B. Barooh Regional Cancer Centre, Guwahati which is better equipped for oncosurgery. The average hospital stay of the cases were 3 days.

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