



Original Article

Incidental Carcinoma Gall Bladder in Patients Undergoing Cholecystectomy for Chronic Calculus Cholecystitis

P K Biswas¹, P K Das², M H Rahman³, D K Mahanta⁴

Abstract

Carcinoma gall bladder (CaGb) is the most common neoplasm of biliary tract. Aetiology of this tumour is complex, but there is a strong association with gall stones. The symptoms are seldom suggestive of cancer and imaging techniques are usually equivocal. This study was conducted to see the frequency of cancer of gall bladder in patients undergoing surgery for chronic cholecystitis with cholelithiasis in different age and sex groups in our population. An observational study was conducted in the department of surgery unit-II Rajshahi Medical College Hospital and Mukti Clinic Rajshahi on the patients admitted with the diagnosis of chronic cholecystitis with cholelithiasis for surgery. Demographic, clinical presentation, imaging studies, operative intervention and histopathological results were examined.

Over the period of 18 months 184 patients were admitted with the diagnosis of chronic calculus cholecystitis for cholecystectomy. 2 (1.09%) patients out of 184 admitted cases were diagnosed as carcinoma gall bladder after histopathology examination. Mean age was 38.5 (4th decade) years and both of them were female. The most common presenting complaints were pain in the right hypocondrium and dyspepsia (51.07%). Normal wall thickness with stone was the most common (63.04%) Ultrasonographic finding. Histologically all CaGb cases were adenocarcinoma. Gall bladder malignancy occurs commonly in 4th decade of life. The patients should be encouraged to have gall bladder surgery once diagnosed as gall stone disease. Every gall bladder specimen should be sent for histopathological examination.

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Introduction

Carcinoma gallbladder (CaGb) is relatively uncommon worldwide, but is the third most common malignancy of gastrointestinal tract and the most common malignancy of biliary tract, shows significant geographic variations in incidence. Highest CaGb incidence rates worldwide were reported for women in Delhi, India (21.5/100,000), South Karachi, Pakistan

(13.8/100,000) and Quito, Ecuador (12.9/100,000)¹. In Bangladesh the incidence of incidental carcinoma of gallbladder were 1.4%².

Aetiology of this tumour is complex, but there is a strong association with gall stones³. Because the symptoms are seldom suggestive of cancer and imaging techniques are usually equivocal, CaGb is rarely diagnosed before surgical removal.

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Prognosis is poor due to unsatisfactory treatment. Five-year survival rate is from 0 to 12% in most reported series¹. Favourable results can be predicted in incidentally diagnosed gall bladder cancer^{5,6,7}. Carcinoma gall bladder has been reported in the age group of 11-15 years but the majority of patients fall in between 50-70 years of age. The incidence of gall bladder carcinoma is less than 1% of all malignances in Great Britain while overall incidence is 1-2% in patients undergoing surgery on biliary tract⁸.

Material and Methods

This observational study was conducted at the department of surgery unit- II Rajshahi Medical College Hospital, Rajshahi and Mukti clinic, Rajshahi. Data was collected over a period of 18 months from 1.10.2008 to 31.3.2010 of all those patients who underwent cholecystectomy for chronic cholecystitis with cholelithiasis. A

prescribed data form to record the patient's details relevant findings on general physical and abdominal examination was used for data entry. All examinations for physical fitness was performed. Ultrasound examinations was done in every case before surgery to look for gall stones, gall bladder mass, gall bladder wall thickness, common bile duct dilation and metastasis. Patients having gall bladder mass and / or metastasis were excluded from this study. All the specimens of gall bladder were subjected to histopathological examinations.

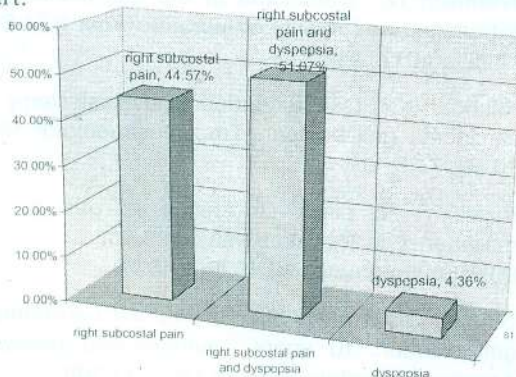
Results

Over the period of 18 months 184 patients of chronic calculus cholecystitis were admitted for cholecystectomy. Among these 154 (83.15%) were female and 30 (16.85%) were male.. Their age and sex distribution is shown in table-I.

Table-I: Age and sex distribution of all patients.

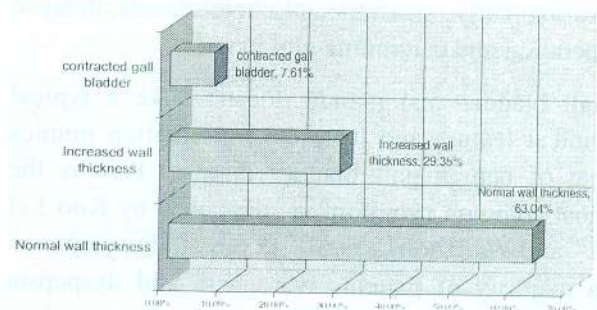
Sex	Age group (in years)						Total	%
	21-30	31-40	41-50	51-60	61-70	71-80		
Male	7	1	5	14	2	1	30	83.15
Female	35	48	19	40	6	6	154	16.85
Total	42	49	24	54	8	7	184	100
%	22.83	26.63	13.04	29.35	4.35	3.80	100	

Symptoms of all 184 subjects have been evaluated and of which 82 (44.57%) patient presented with right sub-costal pain, 94 (51.07%) patient with right sub-costal pain and dyspepsia, and 8 (4.36%) patient with dyspepsia only, shown by column chart.

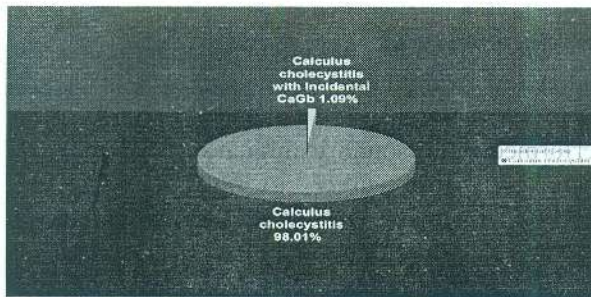


In this study group ultrasonography of hepatobiliary system and pancreas was done in all

cases. Among them findings were 116 (63.04%) patients normal wall thickness, 54 (29.35%) patients increase wall thickness and 14 (7.61%) patients contracted gall bladder. All contains stone shown in the bar chart.



Out of these 184 patients 2 (1.09%) patients were incidentally diagnosed as carcinoma on histopathology examination shown in the pie chart



In these 2 cases of incidental CaGb age distribution were within 4th decade and mean age were 39.5 years, duration of symptom were 5-6 years, in both of them gall bladder were contracted and were adenocarcinoma histopathologically.

Discussion

Carcinoma gall bladder is the most common biliary malignancy and the highest incidence was observed in Delhi, India¹. The aetiology of the tumour is complex but there is strong association with gall stones³. In this study the incidence of incidental CaGb was found 1.09%. Kabir C H² and Strauch GO et al⁹ have shown the incidence of incidentally diagnosed CaGb was 1.4%.

This study have shown that the gall bladder malignancy occurred in an earlier age 4th decade and involved mostly in female. The peak incidence in chinese population is in 6th and 7th decade¹⁰. In Indian population the average age of presentation was 50 years with a range of 50-60years¹¹. This early occurrence could be due to early child bearing, early occurrence of cholelithiasis, delayed operation and carcinoma gall bladder.

Gall bladder malignancy doesn't have a typical clinical feature and its usual presentation mimics that of benign gall bladder disease. Pain is the most common symptom as described by Koo J, et al¹⁰ and Wanebo HJ, et al¹². In our study symptoms in majority of patients were pain and dyspepsia (51.07%), and Pain (44.75%).

Majority of gall bladder malignancy are adenocarcinoma. Silk I.V, et al¹³ have shown that

100% of gall bladder cancer are adenocarcinoma. Chaudhry MA, et al¹⁴ reported that 90% cases are adenocarcinoma. In our study we found that 100% cases are adenocarcinoma histopathologically.

Conclusions

Gall bladder carcinoma occurs in early age, predominantly affecting females. Once the patient is diagnosed as gall stone disease, the patient should be encouraged for early operation. Every gall bladder specimen should be sent for histopathology examination to exclude malignancy.

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Abstract

The study was conducted at Rajshahi city and 180 child workers were selected randomly from different working places such as hotel and restaurant, motor garage, general shops, poultry farm, domestic house, private clinics and private diagnostic centers from January 2009 to March 2009. The study revealed certain variables such as gender, educational level, types of works and wages per month including duration of work of the child workers in relation to their age and the study showed that male were highest in age group 5-9 years and female were highest in age group 13-17 years. The educational level of the respondents was poor in general and in the age group 5-17 years 128 (42.7%) could not read or write at all. The maximum children 44 (15.7%) and 41 (14.8%) respondents were engaged in private diagnostic center and private clinics respectively. The findings could be due to more prevalence of domestic labor at Rajshahi and more prevalence of hotel, private clinics and private diagnostic centers at Rajshahi. Monthly wages of the study respondents was very poor. The study revealed that 24 (13.3%) respondents did not get any wage and they worked for food only. 188 (67.1%) and 38 (13.6%) respondents had wage <500 and in between 500-1000 taka only. The study showed that significant number of children that 238 (85%) had worked more than 8 hours in a day.

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Introduction

Child labor covers all economic activities carried out by children regardless of their occupational status. It has probably being in existence almost as long as the history of mankind. Economic activity is a broad concept that encompasses most productive activities of children it includes both work that is permissible under the International Labor Organization's (ILO) conventions and that which is not. Child labor is prevalent worldwide, occurring both in developing and developed countries. Bangladesh, situated in South Asia, is a

unitary and an independent country since 1971. It is a country of 1,47,270 km² and around 140 millions people with one of the world's most densely populated nations. A child labor is a common problem in Bangladesh with around 2-4.9 millions, about one fifth of all Bangladeshi children aged 5-14 years being classified as child workers (UNICEF, 2008). The study will reveal certain variables such as gender, educational level, types of works and wages per month including duration of work of the child workers in relation to age of the children.

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