

Pattern of Presentation of Gall Bladder Carcinoma and its Surgical Management in South East Punjab.

Gall bladder
Carcinoma and
its Surgical
Management

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ABSTRACT

Objective: The objective of this study was to determine the pattern of presentation of Gall Bladder Carcinoma and Surgical Management in South Punjab.

Study Design: Prospective study.

Place and Duration of Study: This study was conducted Surgical Department of District Headquarters & Teaching Hospital, D.G. Khan Medical College, Dera Ghazi Khan from July, 2018 to July 2019.

Materials and Methods: Total of 25 patients of Carcinoma of Gall Bladder were treated within period of one year. There were 4 males and 21 females with male to female ratio 1:5. Ages of patients ranges from 38 to 72 years with max. incidence in 5th decade. Presenting features were pain in right hypochondrium in 88%, nausea & vomiting in 60%, weight loss in 40%, Jaundice in 28%, mass in right hypochondrium in 20%, pruritis in 20%, fever in 12%, anorexia in 12% and ascites in 4% of cases. The investigations done in these patients were USG abdomen, CT abdomen and other basic investigations.

Results: All the patients were operated and divided into three groups. (i) Nevin staging system I & II. (ii) Nevin III Patients with stage IV & V. Simple cholecystectomy was done in 10 patients of group I. extended cholecystectomy was done in two patients of group II. Laparotomy and biopsy of mass with palliative surgery and bile drainage in 13 patients of group III. Adenocarcinoma was diagnosed in 88% (22 patients) and squamous cell carcinoma in 8% (2 patients) was diagnosed on histopathological study.

Conclusion: The study concludes that gallstones are most important factor causing the carcinoma. So malignancy should be suspected in any long standing cases of cholelithiasis. So early cholecystectomy should be recommended in gall stone cases.

Key Words: gall stone, carcinoma of gall bladder, cholecystectomy.

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INTRODUCTION

Although the gall bladder cancer is not a commonest malignancy yet it is the most commonest tumor of biliary tract and fifth most common malignancy of alimentary tract in USA¹. seen even in young patients of 25 years of age. It is found in 2% of gall bladder operations and in about 80% instances, gall stones are found. It is common in females with male to female ratio 1:4. Its incidence increases with age but in our

Country.² it has been The clinical presentation of all bladder carcinomadiffers depending on the stage of the disease. Common presentations are³ pain in 66%, wt loss in 59%, jaundice in 51% and right upper quadrant mass in 40% patients. Mostly the tumor is discovered preoperatively by biopsy report or at advanced stage.

The tumor spreads by variety of routes⁴ including lymphatic, vascular, direct extension and intra peritoneal seedling.

The treatment of gall bladder cancer is surgery, though the opinions vary to the exact operative procedure which should be done. It is potentially curable in early stages but unluckily the diagnosis is very difficult in early stages. Surgical treatment varies from simple cholecystectomy, extended cholecystectomy, palliative surgery to radical surgery which comprises hepatic wedge resection, extended right hepatectomy, pancreaticoduodenectomy with local and paraortic lymphadenectomy. Burger and malt⁵ (1999) states that there are no surgical benefits following extensive resections.

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MATERIALS AND METHODS

This study was conducted on 25 patients in Teaching Hospital D.G.Khan Medical College, Dera Ghazi Khan from July-2018 to July-2019. The study covers the South Punjab and adjoining areas of Balochistan, Sindh and KPK.

The following protocol with proper history and clinical evaluation was done. History comprises of age, sex, weight, occupation, pain, jaundice, mass in abdomen, nausea, vomiting, anorexia, weight loss with fever, if present. History of pruritis and colour of urine and colour of stool was also noted in patients with jaundice. Family history of jaundice, gall stones and malignancy was also noted. General and special physical examination includes lymphadenopathy, jaundice, mass, visceromegaly and ascites.

The investigations were CBC, ESR, Platelets count, complete urine examination, RPM, S/E, Stool examination, LFT's, PT, APTT, X-ray Chest, ultrasound abdomen and CT abdomen was done. All patients were operated, patients were staged according to "NEVIN" staging system of carcinoma of gall bladder in stage I, II, III, IV and V, and the patients were divided into three groups on basis of operative findings and stage of disease;

- Group I (Stage I & II)
- Group II (Stage III)
- Group III (Stage IV & V).

Group I comprises of 10 patients and simple cholecystectomy was done. Group II comprises of 2 patients underwent cholecystectomy + 3 – 5cm wedge resection of surrounding hepatic parenchyma plus lymph node clearance.

13 patients of Group III were operated, as just only biopsy of mass and 2 nodes in most of these patients. Simple bile drainage was done in 2 cases and has extensive involvement of CBD. The tissue was saved and sent for histopathological evaluation..

RESULTS

During one year, 25 patients of CA gall bladder were studied 22 patients (88%) were admitted through outdoor, 2 patients were referred from medical ward with history of pain in abdomen. Only one (8%) came through casualty department with severe billiary colic. These 25 patients were selected for study and were operated.

Among these 25 patients, there were 21 (84%) females and 4 (16%) males with female to male ratio of 5:1 ranged from 38-73. There were 9 (36%) patients in age group 41-50 years and 10 (40%) patients in age group 51-60 years. Four patients (16%) were above 60 years of age where only one (4%) patient was above 70 year. Thus maximum incidence was seen in 5th decade of life. None of the patient was seen in second or third decade of life. In male patients, the youngest was 38 years of

age. The oldest one was of 73 years. In female patients the youngest one was 40 years of age while oldest female was 68 year of age. All the 21 female patients were married. All these females were housewives. One female worked in office. Among the male patients 2 were labourers while remaining 2 were gazetted Govt. Officers. Thus out of 25 patients only 5 belonged to middle class, while the other belonged to poor status. In 3 males (13.63%) and 19 females (86.36%) complained of pain in right hypochondrium. Many of the patients also complained of associated flatulence and dyspepsia but pain was the most distressing symptom.

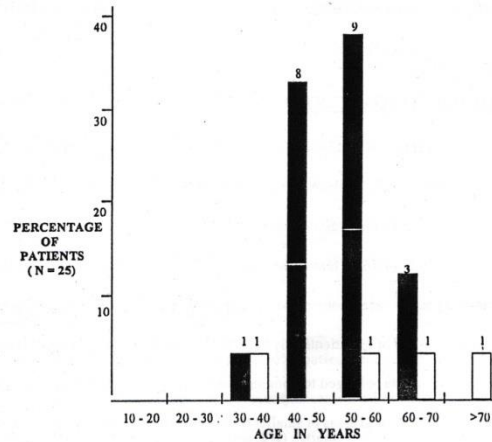


FIGURE NO. 1
AGE & SEX DISTRIBUTION (DECADE WISE) IN PATIENTS WITH CARCINOMA GALL BLADDER

■ FEMALE
□ MALE

Figure-1: Age Sex Distribution Decade wise in Patients

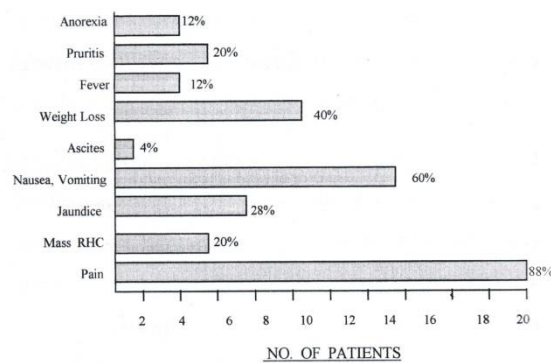


FIG. No. 2
PREVALENCE OF VARIOUS CLINICAL FEATURES IN PATIENTS WITH CARCINOMA GALL BLADDER

Figure-2: Prevalence of Various Clinical Features in Patients with Carcinoma Gall Bladder

In 2 (50%) patients of 4 male patients and in 13 (61.90%) of 21 female patients complained of nausea and vomiting was present. Over all 60% patients

presented with complain of nausea / vomiting. 4 male patients and 6 females patients have the history of weight loss.

Jaundice was present in 2 (50%) of 4 male patients and 5 (23-80%) of 21 female patients. Thus 7 out of 25 patients were jaundiced in this study. 3 (14.28) of 21 female patients and 2 (50%) of 4 male patients presented with mass right hypochondrium, history of pruritis was positive in 5 (20%) patients among which 3 were females 2 were males. Ascites was observed only in one male patient who had advanced disease with peritoneal metastasis.

Thus pain in right hypochondrium was the most common symptom observed in this study. It was present in 22 (88%) out of 25 cases. Next common symptom was nausea & vomiting, observed in 15 (60%) patients, 10 (40%) patients and history of weight loss whereas 7 (28%) patients presented with Jaundice, 5 (20%) patients presented with mass in right hypochondrium. Pruritis was observed in 5 (20%) cases fever in 3 (12%) and ascites was present in one (4%) patient.

Table No. 1: Laboratory investigations.

Findings of Investigations	No. of Patients	%age
Decreased Haemoglobin	13	52%
Increased total leukocyte count	15	60%
Increased ESR	15	60%
Increased serum bilirubin	07	28%
Increased serum alkaline phosphatase	07	28%
Increased SGOT and SGPT	07	28%

Table No. 2 : Nevin's staging of carcinoma Gall Bladder

Stage of the disease	No. of patients	%age
Stage I	03	12%
Stage II	07	28%
Stage III	02	08%
Stage IV	04	16%
Stage V	09	36%

DISCUSSION

Carcinoma of GB is commonest malignancy of biliary tract⁶, ranks 5th in frequency among digestive tract cancers.⁷ it is asymptomatic in its early course, therefore most patients present with advanced disease.

When gallstones are present for prolonged period time, they bring metaplastic and dysplastic changes in mucosa that leads to development of CA gallbladder.

Incidence of carcinoma in our set-up is due to gallstones, presence of chronic typhoid carrier state, early age marriages, use of contraceptives and increased exposure to environmental and industrial pollutants especially of rubber and textile industries⁹.

Similarly in a study carried out in young age group involvement in cases of carcinoma of gallbladder has been reported. Our results correlate well with other local Pakistani literature but figures are less than western literature indicating an earlier age involvement in our set-up.

Carcinoma of gallbladder with other biliary tract diseases is more common in females¹¹ in our study there were 21 females and 4 males, male to female ratio is 1:5.

Other studies from Taiei, France and United Kingdom¹² have showed a male female ratio of 1:4 where as study from USA showed a ratio of 1:3.

Pain in right hypochondrium was present in 88% Jaundice in 28% of our cases while others reported 30% - 45%¹³.

Mass right hypochondrium was present in 20% of our cases while other have reported 15-40-60%.

A pre-operative diagnosis of carcinoma of gall bladder is difficult as there is no remarkable difference in clinical and biochemical findings between benign and malignant gall bladder disease. In our study the carcinoma of gall bladder was incidental finding in 12% of patients on histological examination. While in 10% pre-operative diagnosis was possible with the help of ultrasonography. However in this case the disease was advance in stage IV and VI.

CT scan has been used to detect carcinoma gall bladder. "Thrsenal and colleagues"¹⁴ showed that 19% carcinoma gall bladder could be diagnosed with CT scan. In my study CT scan was done in 1 patient who could afford and 100% helpful in diagnosis.

The ultrasonography is the best method of investigation¹⁵. Because it is cheapest, easily available and noninvasive diagnostic modality.

The treatment which was done in our study was simple cholecystectomy, extended cholecystectomy, biliary drainage, and biopsy in advanced stages. Radical surgery was not attempted in any patient. International literature¹⁶ also favours the fact that extensive surgical resections are not associated with improved survival.

Adeno-carcinoma is the commonest type of carcinoma of gall bladder followed by squamous cell carcinoma and undifferentiated tumours..

CONCLUSION

Carcinoma of gall bladder is commonest malignancy specially in "wanner and nevin" case in the long standing gall stones so early cholecystectomy should be preferred. Ultrasonography is the useful diagnostic test especially with modern machines, the carcinoma of gall bladder can be diagnosed.

Author's Contribution:

Concept & Design of Study: Rasheed Ahmad
Drafting: Muhammad Azim Khan, Nazar Farid

Data Analysis: Farida Buzdar, Majeed Ullah Buzdar and Rizwan Ahmad
 Revisiting Critically: Radheed Ahmad
 Muhammad Azim Khan
 Final Approval of version: Rasheed Ahmad

Conflict of Interest: The study has no conflict of interest to declare by any author.

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