Carcinoma of the Gallbladder

A retrospective study of 30 cases of carcinoma of the gallbladder.

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Aretrospective study of 30 cases of carcinoma of the gallbladder at Shaikh zayed Hospital, Lahore during the period 1988-1989.

SUMMARY

A study of 30 proved cases of carcinoma of gallbladder admitted to Surgical Unit Shaikh Zayed Hospital, Lahore. over two years period (1988-89) was undertaken a total of 504 cholocystectomies were performed, 46 were male and 458 patients were female. Overall incidnece of carcinoma of the gallbladder was found to be 6% but in males 7 out of 46 patients were found having carcinoma (15%). Preoperative dignosis was made in 14 cases of abdominal ultrasonography however all these cases were in advanced stage of malignancy. Majority of patients presented with symptoms and signs benign biliary diseases of varying duration. In 10 cases (33%), the carcinoma was histological surprise, 6 were diagnosed preoperatively, 93% were adenocarcinomas. Associated gall stones were present in 83% cases. Cholecystectomies were performed in all patients, in addition 12 patients underwent hepatic wedge resection. Lymph node disection was not carried out. Two patients died in immidiate post operative period (7% mortality). Radical resection of tumours was not attempted in any patient. No radiation therapy or chemotherapy was advised to the patients in advanced malignancy. Patient with obstructive jaundice either head T-tube drainage or an internal biliary enteric bypass. Early dignosis at a stage amenable to surgical excision remains the sole salvation.

INTRODUCTION

Carcinoma of the gallbladder is most malignant tumour of the bilary tract and fifth most frequent malignancy of the gastrointestinal system. It is charaterised by late diagnosis, ineffectual treatment and poor prognosis. Gallbladder cancer has been variously reported as occuring from 0.55% to 6.5% of operations on the biliary tract. Elderly females are predominently effected and incidence rises with age (1, 3, 4, 10). the cancer presents either with the symptoms of chronic cholecystitis or those of biliary and pancreatic cancers, such as jaundice, weight loss, malaise, anorexia and persistent right upper quadrant abdominal pain. A small number of patients present with benign disease in organs other then gallbladder such as gastrointestinal haemorrhage or symptoms of peptic ulcer disease.[4]. Various modalities of surgical treatment have been advocated such as radical cholecystectomy with wedge excision of liver tissues surrounding the gallbladder bed and removel of regional lymphnodes. However, radical surgery has not improve over all cure rates (6, 7, 13,). Role of radiation and chemotherapy is not yet defined but untill now has been disappointing (5, 6). Carcinoma of the gallbladder has poorest prognosis among the cancers of the digestive system. The reported one year survival is 11.8% at five years survival less then 5% (3, 4, 9, 10). The purpose of this report is to study various clinical aspects of this lethal disease relevent to our population.

MATERIALS AND MATHODES

During the period January, 1988 to December, 1989. 504 Cholecystectomies were performed at Shaikh Zayed Hospital, Lahore. Among these 30 cases of cancer of gallbladder were found. The age and sex incidence, symptomatology, commonest mode of presentation and value of abdomonal ultrasound as diagnostic modality were studies. Various surgical procedure were employed according to the extent of the disease found at operation. Results of treatment and

survival were not studied; as the follow up became very difficult because of lack of any cooperation by the operated cases from distant areas.

RESULTS

Age of patients ranged from 35-70 years with a mean age of occurance was 55 years and a peak frequently was found in the 5th decade of life [Fig I]. Total number of male patients were 7 and 23 were females. The male and female ratio was 1:3. There was no difference in the age of occurance between men and women. Out of 504 patients 46 were male and 7 of them had carcinom of gallbladder (15%).

Table 1 shows the common modes of presentation and symptomatology. The commonest presenting symptom according to frequency was right upper quadrant abdominal pain seen in 28 patients (93%) followed by dyspepsia in 18 (60% of cases), jaundice in 11 (37%), abdominal mass in 8 (27%). Palpable gall bladder was found in 08 out of 30 cases(27%). Other symptoms such as anorexia, nausea, vomating, weight loss, fever and pruritis were also noticed. Diagnosis was based on history, clnical examination, investigations, operative findings and histopathology. Alkaline phosphates was found to be raised in 21 cases that is 70 percent of patients S.G.P.T. and S.G.O.T. was raised in 27 and 17 percent cases respectively. Scrum albumin was found to be low in 20%. Serum bilirubin was raised in 27% of cases. In only 25 percent of jaundiced patients. prothrombin time was prolonged, abdominal ultrasound was used as a routine diagnostic aid in all the cases. Ultra sonographic findings are shown in table 2. All the thirty patients underwent surgery. In only six patients (20%) the tumour in the gall bladder was diagnosed preoperatively. In ten cases (33%) carcinoma was a histopathological surprise. In 12 cases a wedge resection of the liver was carried out where as in the rest of the cases (18) a routine cholecystectomy with extensive fulgarization of the bed was done. Patient with obstructive jaundice either had a T-tube drainage or an interal biliary enteric bypass. The diagnosis of carcinoma gallbledder was confirmed in all the thirty cases by histopathology reports, 28 cases (93%) were reported as adenocarcinomas of the gallbledder. In 2 cases (7%) squamous cell carcinoma was found. Table 4 shows the degree of differentation of the tumours. Two out of thirty patients died in the post operative period. One patient died on thirteenth post operative day. The cause of death was pulmonary embolism. The other

patient died on twenty second postoperative day. The cause of death was septicaemia.

Table 1: Clinical Presentation

Symptoms & Signs	No. of patients	Percentage
		-
R.U.Q. Pain	28	93
Dyspensia	18	60
Abdominal Mass	08	27
Jaundice	11	37
Anorexia	7	23
Nausca & Vomating	8	27
Weight Loss	9	39
Fever	3	10
Pruritis	5	17
Palpable gallbladder	8	27
Ascitis	0	0

Tabel 2: Abdominal Ultrasonography

Findings	No. of Patients	Percentage
Gall Stones	25	83
Gllbladder Mass	14	47
Liver Metastasis	3	10
Para-aortic Lymph Nodes	6	20

Table 3: Histopathology Findings

Тур	e N	o. of Patients	Percentage
Ade	enocarcinoma	28	93
a.	Insitu	1	4
b.	Well differentiated	16	7
C.	Moderately Differenti	ated 9	57
d.	Poorly Differentiated	9	32
Squ	amous Cell carcinoma	2	7

DISCUSSION

Carcinoma of the gallbladder is the most common malignancy of biliary tact. It is the fifth most common cancer of gastrointestinal tract. In this study the operative incidence of carcinoma gallbledder is 6% which is quite high as compare to the International data of 1-2% (4,5) most of our patients presented in 5th decade which is again earlier as compared to other studies where highest incidence was reported to be in 7th decade (6,9). female to Male ratio of 3:1 is similar. Right upper quardrant pain (93%) followed by dyspepsia (60%) were the commonest mode of presentation in this study. Jaundice was present in 37% while a palpable gallbladder or a mass right upper

quadrant was found in 27% each. These are comparable to the International statistics (7,8,11). Ultrasonography was found to be most useful investigation giving a preoperative diagnostic yield of 47%. In the present series the gallbladder cancer was diagnosed first at microscopic examination in 10 cases (33%) which is again comparable to reported data (27%) (4,12). Incidence of associated gallbledder stones in 83% in our study, reported association in various series varies between 70-90% (4,7,11,12).

93% of lesions were found to be adenocarcinoma out of them 57% were moderately differentiated.

Two of our oatients died of septicaemia and pulmonary, embolism in the early postoperative period giving a mortality rate of 7%.

Definite survival figures could not be calculated because of the poor patient compliance.

CONCLUSION

- a. Our study shows a comparatively higher incidence of carcinoma in our population.
- b. The average age of occurance is the fifth decade.
- c. the patient present late when the disease is far advanced we are not sure as to why the incidence is high and the disease occurs in a younger population. we suspected some role of insecticides as a majority of cases came from rural stock where indiscriminate and uncontrolled use of these chemicals is practiced. This is only a suspician and we intend to continue this study with a view to point at the smoking gun difinitively.

REFERENCES

- Chandler et al. A clinical Study of Carcinoma of the Gallbledder. Surg. Gyneco, Obstet 1963, 1117:297-300.
- Den Besten L, Leichty RD. Carcinoma of Biliary Tree. Am. J. Surg. 1965, 109:587-9.
- Throbjarantson B, Carcinoma of Biliary Tree: Carcinoma of the Gallbladder. NY State J. Med. 1975, 109:587-9.
- Piehler J.M. Crichlow RW, Primary Carcinoma of the Gallbladder Surg. Gynecol Obstet. 1978, 147:292-42.
- Shieh et al. Primary Carcinoma of the Gallbladder A review of 16 years Ex. at Waterbury Hospital, Health centre. Cancer 1981, 47:996-1004.

- Silk and Others. Carcinoma of the Gallbladder Annals of Surgery 1989, 210:751-757.
- Koo et al. Carcinoma of the Gallbladder Br. J. surg. 1981, 68:161-165.
- Nevin et al. Carcinoma of the Gallbladder. Staging, Treatment and Prognosis. Cancer 1976, 37:141-148.
- Vaitteinen E. Carcinoma of the Gallbladder. A study of 390 cases diagnosis in Finland (1953-67) Ann Chir Gynaecol 1970 (Suppl) 59:168:7-81.
- Donaldson LA, Busuttil A. Aclinicopathological review of 68 carcinoma of the gallbledder Br. J. Surg. 1975. 62: 26-32.
- Wanebo MD et al. Is Carcinoma of the Gallbledder a Curable lesion Annals of Surgery 1981, 5: 624-31.
- Bergdahl L. Gallbladder Carcinoma first diagnosed at microscopic examination of the gallbledder removed for presumed benign disease. Annals of surgery 1980, 191:19-22.
- X. de Aretaxabala et al. Operative findings in patients with early forms of gallbledder cancer. Br. J. surg. 1990, 77:291-293.

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