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Research Article

**INCIDENCE OF GALL BLADDER CARCINOMA IN PATIENTS
HAVING CHOLELITHIASIS UNDERGOING
CHOLECYSTECTOMY****Dr. Arooj Abbas, Dr. Ayesha Shams, Dr. Mehvish Mariam**
Children Hospital, Faisalabad**Abstract:**

Objective: To evaluate the frequency and timing of the diagnosis of suspected carcinoma of gall bladder in patients prepared for cholelithiasis in cholecystectomy.

Study Design: A retrospective study.

Place and Duration: The Study was held for one-year period from July 2017 to June 2018 in the Allied Hospital, Faisalabad.

Methods: Patients medical records, cholecystectomy for cholelithiasis, and bile duct carcinoma diagnosis with histopathological. With specific reference to the characteristics of the suspicious or undoubted bile duct carcinoma a comprehensive review was made. The suspicion time was categorized according to clinical features, examinations, histopathological findings and surgical findings.

Findings: During the study, 1396 cholecystectomies performed, 16 (1.15%) had bile duct carcinoma. 3 patients only had preoperative features of bile duct neoplasia ultrasonographically, while eight patients had malignant lesions in surgical results. 5 patients were lost and after histopathologic examination the diagnosis was made.

Conclusion: The malignant lesions of the ultrasonographic biliary tree in a significant number removed and histological examination of each cholecystectomy specimen.

Key words: Gall bladder carcinoma, cholecystectomy, histopathological findings.

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INTRODUCTION:

Bile duct carcinoma of the bile ducts is the most common malignancy and of the gastrointestinal tract is the seventh most common carcinoma. In Pakistan, bile duct carcinoma accounts for 3.7% to 5.08% occurs in females. Studies reported that this was the most common gastrointestinal tract malignancy in women. biliary cancer The last reported case 11 years Although the Navajo girl was born, the maximum incidence of biliary cancer is seen in the sixth and seventh years of life. It has been consistently shown that cholelithiasis is associated with bile duct carcinoma, but the exact relationship has not yet been known. The reason for this study is the hypothesis that some of the cases of bile duct cancer are not sent for histopathologic examination due to monetary troubles, some of which are not observed in bile duct patients. Purpose of this study Cholelithiasis cholecystectomy The aim of the study was to determine the timing of the suspicion of biliary cancer diagnosis and its frequency in patients undergoing cholecystectomy in tertiary center for cholelithiasis in an underdeveloped country.

MATERIALS AND METHODS:

This retrospective Study was held for the one years' period from July 2017 to June 2018 in Allied Hospital, Faisalabad. Of these, 102 patients were diagnosed with gall bladder carcinoma according to a histopathological examination with an average of 1.17 bladder carcinoma of the bladder per 1000 patients per year. For cholelithiasis 1,396

cholecystectomy was performed during the same period. open cholecystectomy was done in 443, and laparoscopic cholecystectomy done in 953 patients. For open cholecystectomy indications were associated with empyema of the gall bladder, acute cholecystitis, associated laparoscopic procedures during an initial period of study, and less experienced counselors were ill suitable for the laparoscopic procedure. Inclusion criteria include gallstone clinical history retrospective evaluation, bile-duct carcinoma doubtless raised bile-duct carcinoma, and any preoperative cholecystectomy in patients undergoing histopathological diagnosis of the disease, but such suspicion was ultrasonically diagnosed. Exclusion criteria included pre-operative diagnosis of gallstone cancer, absence of any histopathological diagnosis of gallstone, biliary tree cancer, gallstone disease, bile duct carcinoma as specified in medical records, any preoperative suspicion. Pre-operative suspicion of bile-duct carcinoma is considered to be of clinical relevance, as the results of ultrasound are recorded. Operative findings were intraoperative suspicion when they suggested bile duct malignancy. Histopathologic examination was termed postoperative suspicion when bile duct carcinoma was diagnosed.

RESULTS:

Medical records of this retrospective study identified 16 patients with specific criteria for suspected biliary cancer, together with the selection criteria and key characteristics specified in Table 1.

Table 1. Analysis of suspicion of gall bladder carcinoma.

Suspected or Unsuspected	Number of patients	Mean age (years)	Ultrasonographic findings			Operative findings		
			Gallstones	Thick walled	Irregular wall	Polypoid mass	Palpable gall bladder mass	Enlarged lymph node at porta hepatis
Pre-Operatively Suspected	3	46.7	3	2	3	1	2	2
Intra-Operatively Suspected	8	58.3	8	4	0	0	7	3
Unsuspected	5	65.4	5	2	0	0	0	0

The average age of the working patients was 58.4 between 35-85 years. From 16 patients, females were 14 and 2 were male. In the study, all those patients included who had stones on ultrasonography and for cholelithiasis, cholecystectomy was performed. From these patients half of them had thick-walled bile ducts, and the wall irregular thickening was seen in 3 patients only. Open cholecystectomy was performed in Ten patients and laparoscopic cholecystectomy was done successfully in 1 patient only. For laparoscopic cholecystectomy five procedures have been initiated, but should be converted to open technique depending on the surgical findings / problems. Retrospective evaluation of the file, clinical characteristics and sonographic

characteristics of only approximately one of the patients raised the degree of preoperative suspicion of mainly biliary cancer, but such a doubt mention themselves in the medical history. Approximately half patients had a bile duct that was palpable during surgery, and this was suspected of being cancerous. More than 30% of patients had no doubt about bile-duct carcinoma before histopathological examination. The pre-operative one suspected cases and four of the intraoperative suspected cases were initiated as laparoscopic procedures, but they had to be turned into an open surgical proceduer. The single laparoscopic procedure was successfully completed, even after surgery, bile duct cancer was made before the histopathological examination of the patient without a doubt.

Table 2. Timing of suspicion for gall bladder carcinoma.

Study	Total Patients	Pre-Operative/ Intra-Operative	Post-Operative
Fung Y et al ²⁵	42	22	20
Yamaguchi K et al ⁵	24	10	14
Current Study	16	11	5

In Table 2 shows the comparison of results of this study with other published studies on bile-duct carcinoma suspicion.

DISCUSSION:

On review, Western literature revealed that the rate of bladder cancer in patients undergoing surgery for the presumed malignant disease ranged from 0.3% to 2.85% in patients undergoing cholecystectomy in biliary.5-8 bladder carcinoma in this study 1.15% in this study and some local studies cholecystectomy 4 to 12% carcinoma report, whereas the literature is quite comparable with occidental.5-8. Briefly, it has been suggested that a high proportion of bladder carcinoma is likely to be inadequate in preoperative evaluation. According to other studies in Table 2, Tis and T1 tumors can be treated when bile duct carcinoma is suspected in this study because it is crucial for bile duct carcinoma treatment to be effective when carcinoma is suspected. With simple cholecystectomy, however, T2 or more advanced lesions require radical resection. However, some authors suggest radical resection for early gallstones even in carcinoma (limited to the mucosa or muscle layer) to consider the possibility of metastasis in lymph nodes. first steps. Patients presenting as

coincidental findings in bile duct carcinoma are expected to have a good prognosis. The incidence of biliary cirrhosis varies between 60% and 98% in patients with bile duct carcinoma. Long-term chronic inflammation with cholelithiasis is thought to play a role in carcinogenesis. Despite significant advances in bile duct imaging, the accuracy of diagnosis in bile duct carcinomas is unsatisfactory. Abdominal ultrasonography is a valuable screening method for biliary duct carcinoma. Bile duct carcinoma can be defined as a polypoid mass or focal thickening of the biliary tree wall. Preoperative ultrasonography can detect polypoid bile duct lesions more easily than smooth lesions and is associated with malignancy in diameters greater than 1 cm. Ultrasonography may detect advanced disease up to 70% of cases, but change the sensitivity of the abdominal ultrasound for early detection. A computerized axial tomography scan was frequently used to increase the contrast of the biliary tree wall in assessing diffuse or focal thickening of the biliary tree wall and contrasting malignancy and small polypoid lesions of the biliary

tree wall. Bile ducts have not always been true in some studies, however, when clearly defining bile duct tumors. Ultrasonographic fine needle aspiration cytology has 95% diagnostic accuracy in the evaluation of biliary tree masses and is considered a safe, rapid and accurate method for the diagnosis of biliary tree cancer. In some centers contrast ultrasound was used to evaluate bile duct tumors. Endoscopic ultrasonography and percutaneous transhepatic cholecystoscopy are also valuable tools for the detection and validation of early bile duct carcinoma. Preoperative use of cholangiography, dynamic magnetic resonance, and color Doppler ultrasonography has been associated with a certain degree of success to differentiate between benign and malignant diseases. Further correction of these techniques may lead to better detection of preoperative malignancy in the future.

CONCLUSION:

In the study, it was concluded that all patients with gallstone disease at 1.15% of patients had gallstone carcinoma. More than 30% of the cases were not diagnosed with malignancy before or during biliary cirrhosis. For this reason, each sample must pass histopathologically. Transabdominal ultrasonography is not a definitive method to diagnose bile duct carcinoma. In this study, this study did not detect 75% of cases.

REFERENCES:

1. Alam, Saiyad Shah, Junaid Nazir Dandroo, and Mehjabeen Fatimah. "Gallbladder Papillary Carcinoma, The Difficulty of Early Detection: A Case Report." *Research & Reviews: Journal of Surgery* 6, no. 3 (2018): 12-16.
2. Liu, Chrissy, Nicholas G. Berger, Lisa Rein, Sergey Tarima, Callisia Clarke, Harveshp Mogal, Kathleen K. Christians, Susan Tsai, and T. Clark Gamblin. "Gallbladder carcinoma: An analysis of the national cancer data base to examine hispanic influence." *Journal of surgical oncology* (2018).
3. Jha, Vidya, Preeti Sharma, and K. Ashish Mandal. "Incidental gallbladder carcinoma: Utility of histopathological evaluation of routine cholecystectomy specimens." *South Asian journal of cancer* 7, no. 1 (2018): 21.
4. Tsuchiya, Yasuo, Ernest Loza, Guido Villa-Gomez, Carlos C. Trujillo, Sergio Baez, Takao Asai, Toshikazu Ikoma, Kazuo Endoh, and Kazutoshi Nakamura. "Metagenomics of Microbial Communities in Gallbladder Bile from Patients with Gallbladder Cancer or Cholelithiasis." *Asian Pacific journal of cancer prevention: APJCP* 19, no. 4 (2018): 961-967.
5. Bhemat, D.N., Borkar, D.B., Dhar, R. and Sahu, S., 2018. Adenocarcinoma of Gall Bladder: A Papillary Variant. *INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH*, 5(12).
6. Shukla, Sanjeev Kumar, Govind Singh, K. S. Shahi, and Prabhat Pant. "Staging, treatment, and future approaches of gallbladder carcinoma." *Journal of gastrointestinal cancer*(2018): 1-7.
7. Sharon, Wormi. "INCIDENTAL GALL BLADDER CANCER AFTER LAPAROSCOPIC CHOLECYSTECTOMY FOR SYMPTOMATIC CHOLELITHIASIS-OUR EXPERIENCE." *INDIAN JOURNAL OF APPLIED RESEARCH* 7, no. 11 (2018).
8. Cen, Li, Jiaqi Pan, Boyan Zhou, Chaohui Yu, Youming Li, Weixing Chen, and Zhe Shen. "Helicobacter Pylori infection of the gallbladder and the risk of chronic cholecystitis and cholelithiasis: A systematic review and meta- analysis." *Helicobacter* 23, no. 1 (2018): e12457.
9. Olthof, Pim B., Madelon JH Metman, Ronald R. de Krijger, Joris J. Scheepers, Daphne Roos, and Jan Willem T. Dekker. "Routine Pathology and Postoperative Follow-Up are Not Cost-Effective in Cholecystectomy for Benign Gallbladder Disease." *World journal of surgery* (2018): 1-6.
10. Pang, Liwei, Yan Zhang, Yuwen Wang, and Jing Kong. "Pathogenesis of gallbladder adenomyomatosis and its relationship with early-stage gallbladder carcinoma: an overview." *Brazilian Journal of Medical and Biological Research* 51, no. 6 (2018).
11. Periseti, Abhilash, Saikiran Raghavapuram, Benjamin Tharian, Irfan Warraich, Fred Hardwicke, Rubayat Rahman, and Edwin Onkendi. "Pure Squamous Cell Carcinoma of the Gallbladder Masquerading as a Hepatic Mass." *Cureus* 10, no. 1 (2018).
12. Agarwal, Savita, Pinki Pandey, Megha Ralli, Ranjan Agarwal, and Priyanka Saxena. "Morphologic Characterisation of 1693 Cholecystectomy Specimens-A Study from Tertiary Care Center in Northern India." *Journal of Clinical & Diagnostic Research* 12, no. 1 (2018).
13. Banerjee, Saptarshi, and Subir Pal. "EPIDEMIOLOGY OF CARCINOMA GALL BLADDER ATTENDING RADIOTHERAPY DEPARTMENT OF A MULTISPECIALITY HOSPITAL DURING 2015-2017." *GLOBAL JOURNAL FOR RESEARCH ANALYSIS* 7, no. 3 (2018).
14. Kalra, Naveen, Pankaj Gupta, Manphool Singhal, Rajesh Gupta, Vikas Gupta, Radhika

Srinivasan, Bhagwant Rai Mittal, Radha Krishan Dhiman, and Niranjana Khandelwal. "Cross-sectional imaging of gallbladder carcinoma: An update." *Journal of Clinical and Experimental Hepatology* (2018).

15. Yao, Jingzi, Shengqiang Gao, and Jiansheng Luo. "Preoperative neutrophil-to-lymphocyte ratio as a prognostic marker in patients with gallbladder carcinoma." *Int J Clin Exp Med* 11, no. 5 (2018): 5045-5050.