

OBSTRUCTIVE JAUNDICE; EXPERIENCE AT TEACHING HOSPITAL

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ABSTRACT

OBJECTIVES: (1) To find out the commonest causes of obstructive jaundice (2) To find the age group most affected by obstructive jaundice and male to female ratio in these cases (3) to define the ratio of malignant and benign conditions leading to obstructive jaundice. (4) To suggest the best possible mode of treatment. **DESIGN:** Descriptive study. **PLACE AND DURATION OF STUDY:** Allied & DHQ Hospitals Faisalabad. November 1999 to September 2004. **MATERIALS AND METHODS:** 62 patients admitted through outpatient and emergency departments were included. All the patients were subjected to clinical evaluation and available investigations to reach the provisional diagnosis, which was confirmed by operative finding and histopathological reports. **RESULTS:** The maximum cases of obstructive jaundice due to benign cause were observed in the age group of 31-50 years whereas malignant jaundice maximally affected the age group of 31-60 years. Male to female ratio was 1:2.44. Choledocholithiasis was the commonest benign cause of obstructive jaundice. Carcinoma gall bladder was the commonest malignancy causing obstructive jaundice. CBD exploration and stone extraction was employed to treat the cases of choledocholithiasis. Majority of the cases with malignant jaundice were offered internal biliary drainage through bilioenteric anastomosis or external biliary drainage using T-tube.

CONCLUSION: Choledocholithiasis is the commonest benign cause of obstructive jaundice. Carcinoma gall bladder is the commonest malignancy causing obstructive jaundice. Curative surgery is only possible for treatment in benign cases. Palliative surgery in the form of external or internal biliary drainage could be employed in malignancy due to advanced stage of disease at the time of presentation.

KEY WORDS: Obstructive Jaundice, Carcinoma of Gall bladder.

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INTRODUCTION

Obstructive jaundice can present problems in diagnosis and management. Common causes of obstructive jaundice include gallstones and tumors of the pancreas or bile duct. With gallstones, jaundice may be intermittent if the stone is not firmly stuck. Rarer causes of obstructive jaundice include parasites such as worms, scarring from previous surgical procedures, bile duct inflammations, and, in infancy, congenital malformations of the bile duct system. This is so because, there is a hard core of jaundiced patients in whom it is very difficult to distinguish between benign and malignant obstruction. It is mandatory to determine pre-operatively the existence, the nature and the site of obstruction in the surgical cases because an ill chosen therapeutic approach can be dangerous. Most of the patients with malignancy present to us at a late stage of the disease when only palliation is possible.

MATERIALS AND METHODS

This study was conducted on patients of obstructive jaundice at DHQ & Allied hospital, (PMC) Faisalabad from November 1999 to September 2004. A total number of sixty-two patients were studied. All the patients were subjected to clinical evaluation and available investigations to reach the provisional diagnosis, which was confirmed by operative findings and histopathological reports. Pre-operative evaluation was done as follows:

- Detailed history and clinical examination.
- Complete blood count
- Blood sugar
- Blood urea
- Serum creatinine
- Serum electrolytes.
- Liver function tests and plasma proteins.
- PT & APTT.
- Urine analysis for bile salts & bile pigments
- Ultrasound
- CT Scan
- PTC in patients having intra-hepatic biliary dilatation on ultrasound

RESULTS

AGE INCIDENCE

The oldest patient was 80 years old and the youngest was of 25 years (Table I). The maximum cases of obstructive jaundice due to benign cause were observed in the age group of 31-50 years whereas malignant jaundice maximally affected the age group of 31-60 years.

TABLE-I

Age in years	Benign cases		Malignant cases		Total (n)	
	Number	%age	Number	%age	Number	%age
21-30	04	6.45	04	6.45	08	12.90
31-40	10	16.2	02	3.23	12	19.33
41-50	12	19.35	10	16.12	22	35.50
51-60	02	3.22	08	12.90	10	16.12
61-70	04	6.45	02	3.22	06	9.70
71-80	-	-	04	6.45	04	6.45
Total	32	51.60	30	48.40	62	100

SEX INCIDENCE

Eighteen patients were male and forty-four were female. Male to female ratio was 1:2.44.

ULTRASONOGRAPHY

Ultrasound was found to be accurate in identifying the site of obstruction in forty-eight cases (76%). Cause of obstructions was correctly diagnosed with the help of ultrasound pre-operatively in forty-four cases (70%)

HISTOPATHOLOGY

Forty-four gall bladders, tissue from common bile duct in four cases and lymph nodes in four cases (two supraclavicular and two intrabdominal) were subjected for histopathology. Chronic cholecystitis was reported in all the gall bladder specimens with malignant change in 16 cases. Cholangiocarcinoma was reported in 04 cases. Lymphoma in 02 cases and metastatic deposits from gastric malignancy in 02 cases was confirmed on histopathological report.

Carcinoma head of pancreas was observed in six out of thirty malignant cases. Four were male and two female with eighty, and forty-one years age. They presented with symptoms of progressive jaundice. Muir⁶ reported that carcinoma pancreas is more common in males and Elizabeth⁷ observed that carcinoma pancreas is rare before the age of forty. Lymphoma was diagnosed in two out of fifteen malignant cases. USG abdomen showed enlarged lymph nodes pressing the common bile duct causing progressive jaundice. Feller & Schiffman⁸ reported that extrinsic compression of common bile duct by enlarged lymph nodes due to lymphoma is an unusual cause of obstructive jaundice.

Ultrasound was accurate in locating the site of obstruction and defining the cause of obstruction in 75% and 70% respectively which is well comparable with results of study by Minutolo et al¹¹ who reported accuracy of USG in diagnosing obstructive & non-obstructive jaundice in 97%, site and cause of obstruction in 80% and 79.80% respectively.

Curative surgery has been only possible in the benign cases and only two of the cases of the malignancy of gall bladder. Majority of the cases of malignancy presented with advanced stage of the disease so palliation in the form of biliary drainage either internal (cholecystojejunostomy, choledochojejunostomy) or external (t-tube) could only be offered to these patients.

CONCLUSION

Cholelithiasis is the commonest benign cause of obstructive jaundice. Carcinoma gall bladder is the commonest malignancy causing obstructive jaundice followed by carcinoma of pancreas and cholangiocarcinoma. Curative surgery is only

possible for treatment in benign cases. Palliative surgery in the form of external or internal biliary drainage could be employed in malignancy due to advanced stage of disease at the time of presentation.

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