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CLINICAL PROFILE OF PATIENTS WITH OBSTRUCTIVE JAUNDICE: A SURGEON'S PERSPECTIVES

General Surgery

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ABSTRACT

Background: There are various causes of obstructive jaundice, choledocholithiasis– the commonest. Patients with obstructive jaundice usually present with complain of yellow skin and eyes, pale stools, dark coloured urine, jaundice, and pruritus. Abdominal pain often misleading for diagnosis. The objectives of the study were to study the clinical profile of patients with obstructive jaundice **Methods:** The study included the patients in Narayana medical medical college and hospital clinically diagnosed as suffering from obstructive jaundice. Thorough history taking and clinical examination was done. Patients undergone for various laboratory investigations, and radiological evaluation **Results:** A total 67 patients were included in the present study. Males are more affected (55.20%) as compared to females. Elder age groups (>65 years; and 55-65 years) were commonly affected. 58.20% of patients have malignant causes for development of obstructive jaundice as compared to benign causes in 41.80% of patients. Choledocholithiasis (71.42) is the commonest cause of obstructive jaundice followed by carcinoma of pancreas (43.58%). Jaundice is the commonest symptom of presentation **Conclusions:** Better understanding of the clinical profile in the patients with obstructive jaundice will facilitate appropriate management and lead to improved survival.

KEYWORDS

Obstructive jaundice, Choledocholithiasis.

INTRODUCTION

Obstructive jaundice (surgical jaundice) in simple terms means the outflow of bile has been obstructed anywhere from the liver to the duodenum. A correct pre-operative diagnosis in almost always possible today because of advances in imaging techniques over the decades.Removal of block relieves the symptoms and often results in cure. In present day world surgical jaundice has become more of a medical entity as most of the obstructive jaundice cases are managed by Gastroenterologists by ERCP or by stenting rather than by surgeons. Patients with obstructive jaundice usually present with complain of yellow skin and eyes, Pale stools, dark coloured urine, jaundice,and pruritus.Abdominal pain often misleading for diagnosis– some Patients with choledocholithiasis have painless jaundice, Whereas some patients with hepatitis have distressing Pain in the right upper quadrant.Malignancy often Associated with the absence of pain and tenderness during The physical examination. Early and precise detection of etiology of obstructive jaundice can help surgeons to accurately manage such patients.This will improve quality of life of patient and improving the survival rates among the patients with malignant pathology. Hence, present study was undertaken study the clinical profile of patients with obstructive jaundice.

METHODS

This is a hospital-based prospective observational study.

Setting:
department of general surgery wards in Narayana medical college and hospital, Nellore. Study period: 1 years (2020 to 2021).

Sample Size And Source: – 67

Study Period – 2 years (2020 to2022).

Inclusion Criteria:
The patients, clinically diagnosed as suffering from obstructive jaundice and referred to department of radiodiagnosis for imaging studies

Exclusion Criteria:
Patients below 15 years of age; patients with jaundice due to causes other than obstructive pathology like hemolytic or hepatocellular jaundice.

The written informed consent was obtained from patients before enrolling them into the study. The study included the patients clinically diagnosed as suffering from obstructive jaundice. Thorough history taking and clinical examination was done in each patient included in the study. Patients also undergone for various laboratory investigations, such as, liver function tests for total bilirubin, conjugated bilirubin, alkaline phosphatase, hepatic trans aminases SGOT and SGPT, total serum proteins and serum albumin. Other hematological investigations included hemoglobin estimation, total leucocyte count, differential leucocyte count, platelet count, prothrombin time, International normalized ratio (INR), blood urea, serum creatinine, serum electrolytes. Patients also undergone radiological evaluation like, abdominal ultrasound to evaluate the abnormality of intra and extra-hepatic biliary channels, the common bile duct and presence of causative factors like gall stones, tumors, lymph nodes, worms or any abdominal mass. The data were recorded in structured case record form

Statistical Analysis:
The collected data were subjected to statistical analysis using Microsoft Office Excel. Data was expressed as absolute numbers with or without percentages, as means with standard deviation or as medians with ranges. Frequency comparisons were performed by chi-square test. A probability value less than 0.05 was considered to denote statistical significance

RESULTS

A total 201 patients were included in the present study, who had fulfilled the inclusion and exclusion criteria defined for the study. A total 67 patients were included in the present study, who had fulfilled the inclusion and exclusion criteria defined for the study.In the study, more than half of the patients with obstructive jaundice were males (55.22%) with male:female ratio of 1.23:1. As per the age distribution of the patients, elder age groups were commonly affected with obstructive jaundice – age group of greater than 65 years: 34.33%; and age group of 55-65 years: 22.39%. The mean age of patients was 56.68±23.34 years.majority of patients (63.68%) patients were belong to urban area (Table 1).

Table 1: Demographic characteristics of study population (n=67).

Variables	No.of patients	Percentage
Sex		
Males	37	55.20
Females	30	44.80
M:F ratio	1.23:1	
Age (years)		
15-25	4	5.97
25-35	5	7.46
35-45	6	8.95
45-55	14	20.89
55-65	15	22.38
>65	23	34.32
Mean age		
Residence		

Urban	43	64.20
Rural	24	35.80

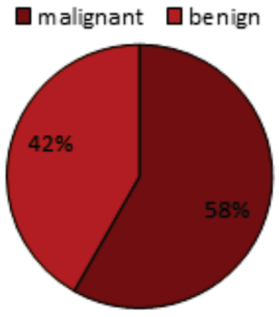

Fig-1 Cause of obstructive jaundice

According to Figure 1 regarding the etiology for the obstructive jaundice, 39 (58.20%) patients have malignant causes for development of obstructive jaundice as compared to benign causes in 28 (41.80%) patients.

Table 2.Distribution of the patients according to etiology of obstructive jaundice (n=67)

Causes	No.of patients	Percentage
Malignant		
Carcinoma of pancreas	17	43.58
Cholangiocarcinoma	11	28.20
Periampullary carcinoma	6	15.38
Secondaries in liver	5	12.82
Total	39	58.20
Benign		
Choledocholithiasis	20	71.42
Benign biliary strictures	6	21.42
Choledochal cyst	2	7.14
Total	28	41.80

In exploring the causes in details, among malignant causes carcinoma of pancreas is commonest cause, responsible for about 1/4th of overall causes for development of obstructive jaundice.Among the benign causes,choledocholithiasis (gall stone in common bile duct) is commonest cause, responsible for nearly 1/3rd of overall causes for development of obstructive jaundice (Table 2).

Table 3.Distribution of the patients according to symptoms.

Symptoms	Malignant causes (n=39)		Benign causes (n=28)		Total (n=67)	
	N	%	N	%	N	%
Jaundice	39	100	26	92.85	65	97.01
Pain abdomen	25	64.10	16	57.14	41	61.11
Itching	24	61.53	18	64.28	42	62.68
Loss of appetite	33	84.61	21	75	54	80.59
Loss of weight	31	79.48	19	67.85	50	74.62
Dark urine	30	76.92	12	42.85	42	62.68
Mass per abdomen	23	58.97	3	10.71	26	38.80

According to symptomatology for obstructive jaundice as per Table 3, jaundice is the commonest symptom presentation (97.01%)– in all patients with malignant etiology; and in 92.85% of patients with benign etiology. Other common representing symptoms include – loss of appetite (80.59%); and loss of weight (74.62%). Dark urine and mass per abdomen were commonly found in the patients with malignant etiology as compared benign etiology.

DISCUSSION:

Obstructive jaundice is not a disorder, but it is a symptom of an underlying diseases condition involving the liver, the gallbladder or the pancreas.It will usually be managed by surgical intervention; hence it is also known as surgical jaundice.In the present study, 67 patients with obstructive jaundice were included in the defined study period. In the present study, males are more affected (55.72%) with obstructive jaundice as compared to females with male :Female ratio of 1.23:1.

The different studies have reported different in male and female predominance. In a study carried out by Anand et al of 80cases of obstructive jaundice, there was a slight female preponderance at 1:1.05, other studies have following Male:female ratio: Hussain Talpur et al: 1:2.32; Lawal et al: 1:0.78; Sharma et a: 1.05:1.15-185

As per the age distribution of the patients in the present Study, elder age groups (>65 years; and 55-65 years) were Commonly affected with obstructive jaundice as Compared with younger age groups.The mean age of Patients was 56.68 years.The mean age of Incidence of obstructive jaundice found to be 48.5 years In the study done by Shukla et al.19 In a study by Sharma Et al mean age was 62.5.Other studies also have Reported similar age groups to be involved in obstructive Jaundice.

Regarding the etiology for the obstructive jaundice, 58.71% of patients have malignant causes for Development of obstructive jaundice as compared to Benign causes in 41.29% of patients. Similar type of Etiological distribution have been found in the study done By Gupta et al, in which it was observed that 63.89% of Cases have malignant causes while 36.11% of cases have Benign causes.More higher prevalence (75.3%) of malignant Causes obstructive jaundice have been found in study of Sharma et al. Literature also suggest that malignant Biliary tract obstruction (MBTO) is the commonest Frequent cause of obstructive jaundice.

In exploring the causes in details in the present study choledocholithiasis– gall stone in common bile duct – is the commonest (30.35%) cause of obstructive jaundice followed by carcinoma of pancreas (25.87%).In a study done by Anand et al regarding clinical profile and the different modalities of treatment of obstructive jaundice, it was reported that common cause of obstructive jaundice was choledocholithiasis followed by malignancy.

In the present study, icterus– jaundice is the commonest symptom presentation (97.01%) in all patients with malignant etiology; and in 92.85% of patients with benign etiology. Other common representing symptoms include loss of appetite (80.59%); and loss of weight (74.62%). In a study by Gupta et al, it was observed that jaundice (91.67%), loss of appetite (77.78%) and abdominal pain (75.00%) were the commonest presentation for obstructive jaundice cases. Jaundice was also the main presenting symptom in the different studies done by of Agarwal et al and Nadkarni et al.

CONCLUSION

- Early and precise detection of etiology of obstructive jaundice can help surgeons to accurately manage such patients and thus will improve quality of life of patient and improving the survival rates.
- Better understanding of the clinical profile in these patients will facilitate appropriate management and lead to improved survival.

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