



A study on etiological profile of obstructive jaundiced patients admitted in JLNMC, Bhagalpur

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ABSTRACT **Aim and Objectives:** Jaundice is the yellowish discoloration of skin and sclera. It may be caused by a heterogeneous group of diseases that include both benign and malignant conditions. As patients with obstructive jaundice have high morbidity and mortality, early diagnosis of the cause of obstruction is very important especially in malignant cases, as proper management can be done.

Materials & Methods: In this study, 60 cases of Obstructive jaundice patients were taken with age group between 20-80 years. Study was done in surgery department of JLNMC, Bhagalpur, Bihar from April 2016 to March 2017. All cases were registered fulfilled the inclusion criteria and exclusion criteria. A detailed history and thorough physical examination followed by investigations including liver function test, ultrasonography of whole abdomen ERCP, CT-Scan, & MRCP and histopathology were done. Results were analysed statistically.

Results: Female were more than males with 38:22. 42 patients had benign causes jaundice of obstructive jaundice and 18 patients had malignant obstructive. Amongst the benign cause's choledocholithiasis was most common cause, 25 patients followed by 09 patient's stricture of common bile duct, 05 patients of post cholecystectomy CBD stone, 02 patients of worm in CBD and 01 patient Choledochal cyst. In malignancies, carcinoma head of the pancreas was the commonest in 10 patients followed by carcinoma gall bladder in 05 patients and cholangiocarcinoma in 03 patients. The most common complaint was abdominal pain followed by clay coloured stools, anorexia and weight loss.

Conclusion: Obstructive jaundice in our setting is more prevalent in females and the cause is benign which is due to choledocholithiasis but the malignant causes are also rising. It is a common surgical problem and poses diagnostic and therapeutic challenges, more common among females with gall stones so need study regarding type and the way of processing of food for patients with gall stones to evaluate the exact relation between types of food and occurrence of gall stones.

KEYWORDS : Choledocholithiasis, Obstructive jaundice, ERCP, carcinoma gall bladder , cholangiocarcinoma.

Introduction:

Jaundice is a common problem in medical and surgical gastroenterological practice. Jaundice refer to yellow discoloration of skin, sclera and mucous membrane resulting from an increase level of bilirubin concentration in the body fluid ,its detectable when plasma bilirubin exceeds 50 M mol /L or 23mg/dl. Obstructive jaundice results from inability of conjugated bilirubin to be secreted into the duodenum due to multifactorial causes, may be intrahepatic causes (medical jaundice) as viral hepatitis ,alcoholic hepatitis ,cirrhosis etc. or Extra hepatic biliary obstruction (surgical jaundice) including choledocholithiasis, benign biliary stricture ,intraoperative biliary tract injury or ligation ,cholangiocarcinoma, carcinoma in the head or neck of pancreas, carcinoma gallbladder, primary sclerosing cholangitis ,hydatid cyst compression or intrabiliary rupture. The fundamental problem met with in dealing with a patient with prolonged jaundice is the accurate diagnosis of its cause whether obstructive or not and if obstructive what exactly its cause. Obstructive jaundice is characterized by the raised levels of serum alkaline phosphatase rather than aspartate transaminase. There are various investigations which could be carried out for the diagnosis of obstructive Jaundice like ultrasonography which can pick up gall stones, dilated intra-extra hepatic channels, any mass in the abdomen and presence of fluid in the peritoneal cavity , but the Gold standard is Endoscopic Retrograde Cholangio- pancreatography (ERCP). ERCP can pick up choledocholithiasis, strictures of CBD, any obstruction of the CBD. Computerized tomography, Endoscopic ultrasound, Percutaneous Transhepatic Cholangiopancreatography (PTC) and Magnetic Resonance Cholangiopancreato- graphy (MRCP) can also be used when required. The serial LFT's though done at various centres remained unsuccessful to differentiate the medical Jaundice from Organic causes. Obstructive jaundice posses diagnostic and therapeutic challenges to general surgeons and contributes significantly to high morbidity and mortality, the challenge is even more conspicuous in a lot of hospitals where delayed presentation of the disease coupled with lack of modern diagnosis (ct scan, ptc. And mrcp) and therapeutic facilities (e.g ERCP ,biliary tract dilator , dormia basket, biliary stents) are among the hall marks of the disease.

Materials and methods:

In this study, 60 cases of Obstructive jaundice patients were taken with age group between 20-80 years. Study was done in surgery department

of JLNMC, Bhagalpur, Bihar from April 2016 to March 2017. All cases were registered fulfilled the inclusion criteria and exclusion criteria. A detailed history and thorough physical examination followed by investigations including liver function test, ultrasonography of whole abdomen ERCP, CT-Scan, & MRCP and histopathology were done. Results were analysed statistically.

Inclusion criteria:

Both male and female patients with obstructive jaundice.

Exclusion criteria:

Patients with hemolytic and hepatocellular jaundice and patient aged <20 yrs and >80 yrs of age.

Results:

Female were more than males with 38:22.

Sex	Number of patients
Male	22
Female	38
Total	60

42 patients had benign causes jaundice of obstructive jaundice and 18 patients had malignant obstructive.

Cause	Number of patients
Benign	42
Malignant	18
Total	60

Amongst the benign cause's choledocholithiasis was most common cause, 25 patients followed by 09 patient's stricture of common bile duct, 05 patients of post cholecystectomy CBD stone, 02 patients of worm in CBD and 01 patient Choledochal cyst.

Benign cause's	Number of patients
Choledocholithiasis	25
Stricture of common bile duct	09
Post cholecystectomy CBD stone	05
Worm in CBD	02
Total	42

In malignancies, carcinoma head of the pancreas was the commonest in 10 patients followed by carcinoma gall bladder in 05 patients and cholangiocarcinoma in 03 patients.

Malignant causes	Number of patients
Carcinoma head of pancreas	10
Carcinoma gallbladder	05
Cholangiocarcinoma	03
Total	18

The most common complaint was abdominal pain followed by clay coloured stools, anorexia and weight loss.

Complaints	Number of patients
Abdominal pain	34
Anorexia	18
Weight loss	16
Chills and rigors	08

Discussion:

Obstructive jaundice is an important entity as the obstructive lesions of the biliary system are difficult problem for the surgeon as most of the patients are old and poor surgical risks. This study was done to see clinically the causes of obstructive jaundice in our area in one year period, the jaundice being proved by history, examination and laboratory investigations. Evaluation of obstructive jaundice is common but challenging radiological problem. The aim of the imaging is to diagnose biliary obstruction by identifying dilatation of intra and extra-hepatic biliary channels; to delineate the level of obstruction. Majority of patients in this study had benign obstructive jaundice, i.e., 42 while the malignant jaundice was seen in 18 cases. Comparing the other studies done elsewhere, the observation in our study implies, the overall incidence of obstructive jaundice was more in females than males. The mean age of incidence of surgical jaundice is 38 yrs. The incidence of choledocholithiasis was more common in females. The most common cause of malignant obstructive jaundice was carcinoma head of pancreas, which is more common in female population especially in fourth and fifth decade of life. The increased incidence of obstructive jaundice amongst the females is due to the fact that gall stones are frequently found in them. Other studies have been done for the evaluation of the etiological spectrum of obstructive jaundice and the study by Muzaffar Aziz et al showed the incidence of malignant jaundice in 84% and benign in 16% of the patients. In this study, benign obstructive jaundice was found more commonly amongst the females than males.

Conclusion:

Obstructive jaundice in our setting is more prevalent in females and the cause is benign which is due to choledocholithiasis but the malignant causes are also rising. It is a common surgical problem and poses diagnostic and therapeutic challenges, more common among females with gall stones so need study regarding type and the way of processing of food for patients with gall stones to evaluate the exact relation between types of food and occurrence of gall stones.

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