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# Choledochoduodenostomy- As a Routine Procedure in Cases of Common Bile Duct Obstruction

Saikat Majumdar<sup>1</sup>, Ravindra Prasad<sup>2</sup>, Arvind Kumar<sup>3</sup>

<sup>123</sup>Dept of General Surgery, Patna Medical College, Patna

## INTRODUCTION

Choledochoduodenostomy is a surgical procedure in which there is anastomosis done between common bile duct and the first part of the duodenum. It is done in cases of common bile duct obstruction mostly the distal obstruction. The obstruction of common bile duct especially the distal part has various causes among which choledocholithiasis is the most common cause. Other causes can include biliary sludge, parasites, and biliary strictures. It was first performed by Sprengel in 1891 and since then is considered as an effective method. Rapid evolution in the management of biliary tract disorders over the past 3 decades has resulted in a number of alternatives to this method but nevertheless the need for this operation especially in centres where modern armamentarium are not available like ERCP. Also that the newer methods like ERCP have limited access to the general population due its cost and lack of availability and so choledochoduodenostomy still holds a good option in such situations.

### **METHODS**

In the present study, 30 cases of common bile duct obstruction mostly distal were selected after detailed history, clinical examination and routine and special investigations. Those patients in which the common bile duct diameter was of more than 1.5 cms either on USG or per operative examination were included. Those patients in whom features of cholangitis or acute pancreatitis at the time of admission were found were excluded from the study. Clinical parameters regarding pain abdomen, jaundice, fever, mass per abdomen were noted and routine investigations including sr bilirubin, sr alkaline phosphatase, BT, CT, PT, INR were done for all patients. Post complications were studied and noted.

# **RESULTS**

Out of the 30 cases, 24 cases (80%) were females and maximum cases belonged to the age group of 51-60 years. 66.67% patients belonged to the rural background. 83.33% cases had choledocholithiasis as the cause of obstruction.

CAUSES	NUMBER OF CASES	PERCENTAGE
Multiple stones	23	76.67
Single impacted stone	2	6.67
Biliary sludge	3	10.00
Distal bile duct stricture	2	6.67
Parasites	0	0

2 patients had distal common bile duct stricture as the cause.

COMPLICATIONS	NUMBER OF CASES	PERCENTAGE
Wound infections	4	13.33
Alkaline reflux gastritis	3	10.00
Cholangitis	1	3.33
Septicaemia	1	3.33
Biliary fistula	0	0
Recurrent/Retained stones	0	0
Sump syndrome	0	0

In post op period, 4 cases(13.33%) cases had wound infection followed by alkaline reflux gastrititis in 3 cases(6.67%), 1 cases had cholangitis but no cases of recurrent/retained stones or Sump syndrome were reported. At follow up of the patients after 1 month, pain abdomen was reported in 2 cases (9.09%) whereas other patients did not have any complaints. At 6 months, none of the patients who had come for follow up had any complaints.

# **DISCUSSION**

The age group and sex ratio of the study matched with that of the previous studies done by Adams (1947) Christopher (1972) and Gupta BS(2003).

The cause of obstruction of this of CBD being choledocholithiasis as the most common cause was also observed by Karel(1977), Swartz et al and Srivengadesh et al (2003). However, the study done by Gilbert (1947) found malignancy (43%) to be the most common cause.

The complication of wound infection being most common was also observed by Sitanath de et al (2003). Srivagedesh et al reported 4.8% anastomotic leak which was not seen in this study. Though Sump syndrome is a known complication of this procedure, No cases of Sump syndrome was reported in this study.

### **CONCLUSION**

Choledochoduodenostomy is a simple, safe and effective procedure for internal drainage of bile in cases of common bile duct obstruction. It virtually eliminates the risk of retained and recurrent stones and in this way reduces the overall morbidity and mortality of the patients. So it is concluded that choledochoduodenostomy is an effective alternative option to treat cases of common bile duct obstruction wherever it is possible to make a stoma of adequate size.

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