Original Research Paper



General Surgery

A STUDY OF VARIOUS SURGICAL PROCEDURES FOR CHRONIC PANCREATITIS

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ABSTRACT Chronic pancreatitis, a benign inflammatory process of the pancreas resulting in exocrine and endocrine insufficiency. Pain is the most devastating symptom, for which patient seeks medical advice. Even though these problems are addressed medically, surgery is indicated in many cases of intractable pain. We study thirty-one patients who are managed surgically during 2018 June to 2020 March at our institute. Pain relief, improvement of exocrine and endocrine insufficiency and improvement of quality of life are studied.

KEYWORDS: Chronic Pancreatitis, Pain, Exocrine And Endocrine Insufficiency.

INTRODUCTION

Chronic pancreatitis refers to an ongoing inflammatory and fibrosing disorder characterized by irreversible morphologic changes, progressive and permanent loss of exocrine and endocrine function, and a clinical pattern of recurrent acute exacerbation or chronic persistent pain. Globally, the incidence of CP is between 2 and 200 per 100,000 persons and shows an increasing trend year by year. India has the highest incidence of CP in the world at approximately 114 to 200 per 100,000 persons. Pancreatic duct hypertension, pancreatic inflammation, and peripancreatic immune cell infiltration usually plays important roles in the mechanism of abdominal pain.

Several studies have shown that for the treatment of patients with CP, surgical treatment is better than endoscopic treatment.

Surgical treatment for chronic pancreatitis are:

- 1. intractable pain
- 2. complications
- 3. to improve quality of life.

Various surgical procedures include

- 1. Puestow method
- 2. Freys procedure
- 3. Begers procedure
- Classical whipples
- 5. Pylorus preserving whipples procedure
- 6. Duodenum preserving head resection
- Distal pancreatectomy

We are presenting the series of chronic pancreatitis managed at government general hospital Kurnool.

AIMS & OBJECTIVES:

- To study the etiology and risk factors associated with chronic pancreatitis
- 2. To know the indication of surgery
- To know the outcome and response of the surgical drainage procedure.

METHODS:

All the patient with suspected need of surgery in chronic pancreatitis and data collected regarding relief of pain, improvement in endocrine and exocrine insufficiencies.

Routine lab. investigations, serum amylase and lipase, USG abdomen CECTAbd, (main pancreatic duct dilatation and calcification in duct)

This is a prospective study of thirty-one surgically treated patients at our institution conducted from June 2018 to March 2020.

STATISTICS

Thirty-one patients and divided according to their presentation, age of

distribution, alcohol, exocrine and endocrine insufficiency and method of surgery followed and post-operative follow up.

Males in study are 19 (61%) and females 12(39%). Alcoholic 12 (39%) and non-alcoholic 19 (61%).

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Gender	No.of patients		Percentage %				
Male	19		61				
Female	12		39				
Alcoholic		Non alco	holic				
12		19					
39%		61%					
Age distribution	No.of patients		percentage				
15 - 25	8		26				
26 - 35	10		32				
36 - 45	9		29				
46 - 55	4		13				

Clinical presentation

31 patients have pain abdomen

Presentation	No. of patients	Percentage %
Exocrine insufficiency	8	25
Endocrine insufficiency	4	13
Any complications (biliary	-	-
obstruction, splenic vein		
thrombosis, duodenal		
obstruction)		

Main pancreatic duct dilatation

Duct in mm	No. of patients	Percentage %
5 to 6	11	35
7to 8	18	58
9 to 10	2	7

Type of surgeries

Type of surgery	No. of patients	Percentage
MODIFIED PEUSTOW	28	90
FREYS	2	6
CLASSICAL WHIPPLES	1	4

In two patients in acute condition only done because of intractable pain and of some pus collection.

13 of them had given celiac plexuses block, had given in whom duct was not so dilated as synergistic action.

RESULTS

 On post op follow up there is reduction of pain intensity is seen and in whom coeliac plexuses block given there is significant early relief of pain.

- 2. 75% of improvement is seen in case of exocrine insufficiency
- 3. 50% of reduction of insulin dosage and good glycemic control.
- 4. Good quality of life is seen.

POST-OPERATIVE COMPLICATION

- In case of whipples on pod 2 there is hepaticojejunostomy leak is noticed. Managed conservatively.
- On pod 5 there is collection in abdominal cavity and we aspirated the collection USG guided
- From pod 7 T tube output increased and at the same time ADK drain output decreased.
- We removed the ADK after 2 weeks and T tube after 6 weeks.

DISCUSSION

Chronic pancreatitis is a disease of alcoholics but tropical pancreatitis is in in tropical countries like INDIA. Preservation of already limited functionality of the pancreas occupational rehabilitation and increase in quality of life.

So, organ preserving surgeries are becoming popular.

Collection of data on quality of life should be done with the help of standardized questionnaires so that effective comparison of different surgical procedures for chronic pancreatitis is possible.

Aggressive management of chronic pancreatitis is necessary as this is the best way for pain and better results can be obtained with selection of procedure tailormade to the patient.

When it comes to surgical techniques, drainage operations are safe and efficient for short term pain relief, especially in patients without an enlarged pancreatic head.

Now a days the duodenum preserving resection techniques offer best outcome for patient with painful chronic pancreatitis and an inflammatory mass in the pancreatic head and therefore should be considered as the current standard of care, while the different variants of this technique seem to retrieve similar results.

Addition of intra-op coeliac plexuses block sustain pain relief. so it may be advised to the patient whose duct is small in which long lasting pain is there.

REFERENCES

- Ammann RW, et al: Course and outcome of chronic pancreatitis. Longitudinal study of a mixed medical-surgical series of 245 patients, Gastroenterology 86:820–828, 1984.
- Izbicki JR, et al: Surgical treatment of chronic pancreatitis and quality of life after
- operation
 Frey CF, Amikura K: Local resection of the head of the pancreas combined with
- rrey Cr, Amikura K: Local resection of the head of the pancreas combined with longitudinal pancreaticiogijunostomy in the management of patients with chronic pancreatitis, Ann Surg 220:492–504, 1994.

 Gress F, et al: A prospective randomized comparison of endoscopic ultrasound- and computed tomography-guided celiac plexus block for managing chronic pancreatitis pain, Am J Gastroenterol 94:900–905, 1999.