

## Clinical Study and Management of Pseudocyst of Pancreas in GSL Medical College, Rajahmundry.

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**Abstract:** Pancreatic pseudocysts are encapsulated collections of necrotic tissue, old blood and secretions from pancreas. The prefix pseudo is used to emphasize the fact that these collections frequently do not have true capsule and cyst wall is made with the adjacent viscera such as stomach and/or colon, Pseudocysts are most common complications following acute or chronic pancreatitis, pancreatic trauma, or obstruction of pancreatic duct by a neoplasm. In our prospective study of 30 patients, the age of patients from 20 years to 65 years. Pseudopancreatic cyst was common in 31 to 50 years with mean age group of 40 yrs. This was probably alcohol use which was more common in this age group with ratio of male to female is 14:1. Ultrasonography and CT scan were the most useful investigations for diagnosis and follow-up. Barium meal was required in selected cases. Acute pseudocysts were treated conservatively, infected cysts required external drainage. Percutaneous aspiration resulted in recurrence in our cases. Anastomoses of the cyst to the nearby bowel, either cystogastrostomy or cystojejunostomy was done in the majority of cases with good results. Most common post operative complications are persistent pain abdomen and wound infection. Total duration of hospital stay ranged from 10 to 15 days. Follow up was done for 3 to 6 months, 2 cases lost follow up. Recurrence is seen in two cases who refused admission.

**Keywords:** pancreas, pseudocyst, cystogastrostomy

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### I. Introduction

Pancreatic pseudocysts are encapsulated collections of necrotic tissue, old blood and secretions from pancreas. The prefix pseudo is used to emphasize the fact that these collections frequently do not have true capsule and cyst wall is made with the adjacent viscera such as stomach and/or colon, Pseudocysts are most common complications following acute or chronic pancreatitis, pancreatic trauma, or obstruction of pancreatic duct by a neoplasm.

Pseudocysts account for about 75% of cystic lesions of pancreas and are differ from other peri pancreatic fluid collections i.e. cystic neoplasms and congenital, parasitic and extra pancreatic cysts by,

- 1) Lack of epithelial lining
- 2) high concentration of pancreatic enzymes
- 3) Formation at least 4 weeks after an episode of pancreatitis and trauma.

Pseudocyst is formed by an inflammatory response that occurs after extravagated pancreatic secretions are walled off by the surrounding structure. Pseudocysts present clinically with epigastric pain, abdominal masses to jaundice. Laboratory findings are not much of use in diagnosis of pseudocyst. Ultrasonography, CT scan, MRI helps in the diagnosis of pseudocyst, these investigations help in therapeutic procedures to be carried out.

The treatment includes team of radiologists, endoscopists and surgeons. Radiologists by way of guided percutaneous aspiration techniques for aspiration /drainage to therapeutic embolization of bleeding aneurysms, endoscopists by endoscopic drainage.

Surgeons play an important and definitive role in therapeutic team with variety of techniques both open and laproscopically. It is ultimately to provide adequate, dependent drainage of pseudocyst contents before presentation of complications

This study is know the various etiological factors ,relative frequency of occurrence in relation to age and sex , establish accurate diagnosis by various investigations and to study various modes of management which include conservative ,percutaneous drainage and surgeries.

### Aims & Objectives Of Study

1. To find out the relative frequency of pseudo cyst of pancreas in relation to age and sex.
2. To establish accurate diagnosis by various investigative procedure USG abdomen and CT abdomen.
3. To compare modes of management like conservative, percutaneous drainage and surgery.

## II. Materials And Methods

The present study, A CLINICAL STUDY AND MANAGEMENT OF PSUEDOPNACREATIC CYST was done in the department of General surgery, GSL General Hospital, RAJAMUNDRY between November 2016 and October 2018.

**Study design:** Hospital based prospective and observational study.

**Study period:** November 2016 to October 2018.

**Study subjects:** Patients who admitted in GSL General Hospital with pseudo pancreatic cyst with the help of clinical examination, diagnostic procedures like USG Abdomen, CT Abdomen. A total of 30 patients who were diagnosed with pseudo pancreatic cyst between November 2016 and October 2018 were included in the study.

**Age group:** above 18 years.

### Inclusion criteria:

1 Patients diagnosed as pseudo pancreatic cyst with the help of clinical examination, diagnostic procedures like USG Abdomen, CT Abdomen.

2. Admitted patients of both sex and above 18years age groups

### Exclusion criteria:

a) All the true cysts of Pancreas.

b) Neoplastic cystic swellings of Pancreas.

c) Hydatid cyst of Pancreas.

d) Congenital cysts of Pancreas.

### Methodology:

All patients with PSEUDO PANCREATIC CYST satisfying the selection criteria are included in the study after taking informed consent Patients admitted under the department of general surgery in GSL MEDICAL COLLEGE &HOSPITAL, satisfying the inclusion and exclusion criteria will be taken for the study. First the clinical diagnosis is made by:

1) Detailed history of the patient

2) Complete physical examination: General and Systemic.

3) Investigations: The results will be tabulated analyzed using appropriate stastical methods & conclusions will be drawn regarding the incidence, management& outcome in patients presented in GSL general hospital Rajahmundry, Study was conducted from November 2016 to October 2018.

## OBSERVATION AND ANALYSIS

The results obtained were analyzed as follows:

**TABLE1: AGE DISTRIBUTION**

AGE DISTRIBUTION	NUMBER	PERCENTAGE
20-30 YEARS	8	26.6%
31-50 YEARS	20	66.6%
ABOVE 50 YEARS	2	6.6%

In our study of 30 patients, the age of patients from 20 years to 65 years. Psuedopancreatic cyst was common in 31 to 50 years with mean age group of 40 yrs. This was probably alcohol use which was more common in this age group.

**TABLE – 2: SEX INCIDENCE.**

Sex	No of patients	Percentage
M	28	93.33
F	2	6.67

In current study of 30 patients, there were 28 (93.33%) male patients and 2 (6.67%) female patients indicating that the disease is more common in males with ratio of male to female is 14:1. This again was due to a higher alcohol intake in male.

**TABLE -3; SYMPTOMS**

Symptoms and signs	No of patients	Percentage
Abdominal pain	30	100
Nausea/vomiting	20	66.6
Abdominal distension	25	83.3
Anorexia	7	23.3
Fever	4	13.3
Weight loss	5	16.6
Jaundice	1	3.3

The commonest symptom was abdominal pain which was present all patients (100%), followed by nausea/vomiting which was present in 66.6 % patients and abdominal distension was present in 83.3% patients.

**TABLE -4: SIGNS**

SIGNS	NO. OF CASES	PERCENTAGE
MASS ABDOMEN	17	56.6%
ASCITES	1	3.3%
LLEUS/INTESTINAL OBSTRUCTION	1	3.3%
ABDOMINAL TENDERNESS	30	100

**TABLE -5: RISK FACTORS**

RISK FACTORS	NO OF PATIENTS	PERCENTAGE
ALCOHOL	24	80%
BILIARY DISEASE	1	3.3%
IDIOPATHIC	3	10%
TRAUMA	2	6.6%

The commonest risk factor was alcohol consumption which was present in 80% of Patients, followed by idiopathic in 10 %, trauma was present in 6.6% of patients and biliary disease in 3.3% patients.

**TABLE-6 associated complications**

COMPLICATIONS	NO. OF CASES	PERCENTAGE
INFECTION	4	13.3
ASCITES	1	3.3
OBSTRUCTION	1	3.3
RUPTURE	-	-
HAEMORRHAGE	-	-

Infection was the complications found in 13.3 % of patients, followed by ascites and obstruction (3.3 %) in each groups and there were no cases of hemorrhage and obstruction.

**TABLE -7 INVESTIGATIONS.**

Investigations findings	No . of cases	Percentage
Increased serum amylase	5	16.6
increased ascitic amylase	1	3.3
Barium meal (+ve)	0	-
USG (+ve)	30	100
CT SCAN (+ve)	30	100

Ultrasound was the basic investigation done in all patients (100%), CT scan was done in all Patients to know the extent and complication of cyst that cannot be made out in ultrasound. Serum amylase was done in all patients which was positive in all cases of acute pancreatitis (8 cases) and ascitic amylase was done in 1 (3.3%) of patients and results were positive.

**TABLE -8 TREATMENT :** The commonest treatment was cystogastrostomy in 43.3% of the patients, followed by External catheter drainage in 23.3%, conservatively managed in 23.3% of the patients.

TREATMENT	NO OF CASES	PERCENTAGE
CONSERVATIVE	7	23.3
PERCUTANEOUS ASPIRATION	2	6.6
EXTERNALCATHETER DRAINAGE	7	23.3
CYSTOGASTROSTOMY	13	43.3
CYSTOJEJUNOSTOMY	1	3.3
DISTAL PANCREATECTOMY	-	-

### III. Conclusion

Pancreatic pseudocyst is the most common cystic lesions of pancreas, accounting for 75%-80% of such lesions.

1. The disease was most common in the age group 31-50 years and was seen predominant in males.
2. Most common cause for the pseudocyst is alcohol induced, followed by idiopathic.
3. Most common presentation is pain abdomen with abdominal tenderness.
4. Ultrasonography and CT scan were the most useful investigations for diagnosis and follow-up. Barium meal was required in selected cases.
5. Acute pseudocysts were treated conservatively, infected cysts required external drainage. Percutaneous aspiration resulted in recurrence in our cases.
6. Anastomoses of the cyst to the nearby bowel, either cystogastrostomy or cystojejunostomy was done in the majority of cases with good results.
7. Most common post operative complications are persistent pain abdomen and wound infection.
8. Total duration of hospital stay ranged from 10 to 15 days
9. Follow up was done for 3 to 6 months, 2 cases lost follow up. Recurrence is seen in two cases who refused admission.

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