

A study on OGD Scopy Findings in Acute Pancreatitis

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Abstract

Background: The aim of the study was to list different mucosal lesions in the established acute form of pancreatitis in the upper part gastrointestinal tract in endoscopy.

Methods: We performed a prospective study in patients over 18 years of age with acute pancreatitis. Abdominal pain with sudden onset or serum amylase and/or lipase > 2 times upper limit of normal. characteristic of acute pancreatitis in Abdominal computed tomography (CT) or typical findings of acute pancreatitis in Ultrasound scan. Patients who are unfit or not willing to undergo endoscopy or who have a peptic ulcer disease detected during endoscopy, peptic ulcer disease in the last 3 months is excluded.

Results: In this study, the most common age group for acute pancreatitis was 30-60 years. In this study, alcohol is the most common cause of acute pancreatitis, accounting for 90% of the study. Abdominal pain is the most common symptom. CT scan is most (100%) confirmatory in the diagnostic study of acute pancreatitis. This study involved 30 patients with acute pancreatitis. In OGD, 24(80%) patients had a positive finding in the upper gastrointestinal tract, in that 16 patients(53.33%) significant Gastritis found. An enlarged pancreas is the only CT finding in most cases.

Conclusions: Esophagitis and duodenal and gastric ulcer are common endoscopic findings in acute pancreatitis. They do not correlate with the severity of pancreatitis.

Keywords: Acute pancreatitis; Gastric ulcer; CT abdomen; Duodenal ulcer; Esophagus

1. Introduction

Acute pancreatitis is a common and serious disease which can cause both local and systemic complications. Its characteristic is acute pancreatitis little or no fibrosis. It ranges from mild self-limiting pancreatitis to critical illness characterized by infected pancreatic necrosis, multiple organ failure and high risk of mortality. Clinically the result has improved in recent decades, even in lack of specific therapies that target the pathophysiology of the result, probably a more consistent approach to diagnosis, and monitoring. Annual incidence of acute pancreatitis among Americans is 4 in 100,000; in for whites it is 5.7 per 100,000 inhabitants; and black it is 20.7 per 100,000 inhabitants. However, the effect of different forms of pancreatitis varies by source and country origin and population studied. Acute pancreatitis caused by unregulated activation of the pancreas enzymes that can cause further pancreatic complications decreased due to persistent hypovolemia intravascular volume and multiple organ dysfunction. This study deals with study gastrointestinal endoscopic findings in the established acute form pancreatitis in our hospital. Despite the technicalities advances in medicine and surgery in acute pancreatitis remains a major cause of morbidity and mortality. Acute pancreatitis is defined as an acute illness, abdominal pain and is usually accompanied by due to an increase in pancreatic

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enzymes in the blood or urine due to inflammatory disease of the pancreas. By definition, acute pancreatitis is reversible. It is distinguished from chronic pancreatitis, defined as a chronic inflammatory disease of the pancreas characterized by irreversible morphological change and usually results in pain and/or permanent loss of function. Many patients with chronic pancreatitis may have exacerbations, but the condition can be completely painless.

Aim

To enumerate the various mucosal lesions established in Acute pancreatitis in OGD scopy.

2. Methods

2.1. Study Design

A prospective observational study.

2.2. Subjects

Patients diagnosed with acute pancreatitis are admitted in KGMCH, Asaripallam.

2.3. Inclusion criteria

Patients with acute pancreatitis over 18 years. Diagnosis of pancreatitis was based on the presence of two of the following three signs: 1. Typical abdomen pain consistent with acute pancreatitis, 2. Serum amylase and/or lipase level > 2 times the upper limit of normal, 3. Typical findings of acute pancreatitis in CT Abdomen or Ultrasound scan, 4. When the patient gives written informed consent.

2.4. Exclusion criteria

- Patients who were not willing to ready for endoscopy.
- Endoscopy found peptic ulcer.
- Peptic ulcer disease in the last 3 months.

2.5. Study setting

This study is conducted in Department of General Surgery, Government Kanyakumari Medical College and Hospital.

Study period: September 2023 to December 2023 Approval by the ethics committee of the institution

2.6. Sample size

30 Patients

Data collected using:

- Clinical trials
- Biochemical studies - serum lipase, serum amylase
- Radiological examination - USG and CT Abdomen.
- OGD scopy.

Data were analyzed using SPSS software version 16.

3. Results

The most common age group in this study acute pancreatitis was 30-60 age group(80%) , followed by less than 30 age group(13.3%).

Table 1 Age Distribution of cases

Age	Cases	Percentage
<30	4	13.3%
30-60	24	80%
>60	2	6.7%
Total	30	100%

Pancreatitis was more common in this study 92.5% of the research group are men. Alcohol is the most common cause in this study, acute pancreatitis, which was 90% of the study group.

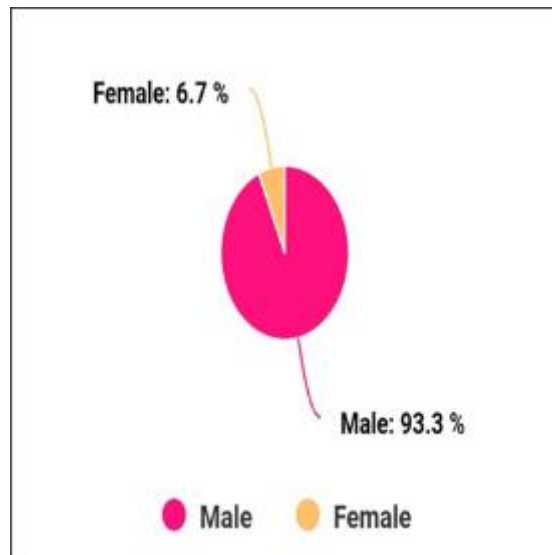


Figure 1 Sex distribution

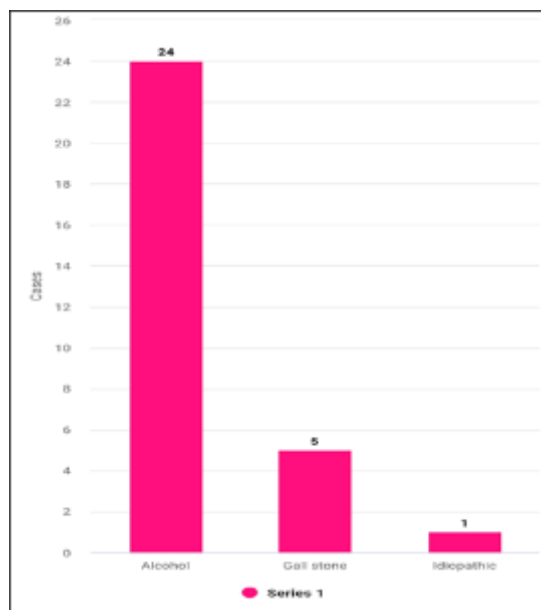


Figure 2 Etiology distribution

Table 2 Symptoms of Pancreatitis

Symptoms	No. Of Cases	Percentage
Pain Abdomen	30	100
Nausea	18	60
Vomiting	12	40
Abdominal Distension	2	6.7
Fever	2	6.7
Jaundice	1	3.3
Heartburn	14	46.7

Abdominal pain was the most common in this study, Dyspeptic symptoms in 30cases (100%), followed by nausea in 18 cases(60%) and heartburn, which was 14 cases(46.7%). Another symptoms are vomiting 12 cases(40%), fever 2 cases(6.7%), Jaundice 1 case(3.3%).

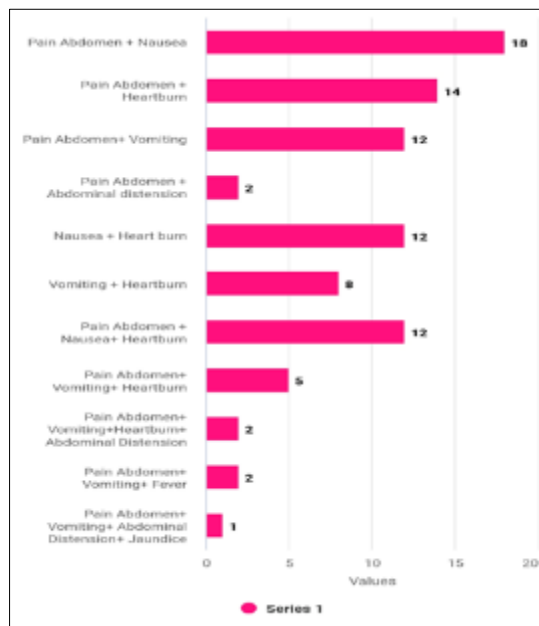


Figure 3 Symptom complex

Currently survey shows, abdominal pain and Nausea was the most a common symptoms(60%) followed by abdominal pain and heartburn(46.7%).

Table 3 Diagnostic Investigations

Test	Done in	Supported Diagnosis
Serum Lipase	All	25(83.3%)
Serum Amylase	All	23(76.7%)
Both	All	28(93.3%)
USG Abdomen	All	27(90%)
CT Abdomen	All	30(100%)

In this study, CT scan is the most (100%) common study to confirm the diagnosis of acute pancreatitis.

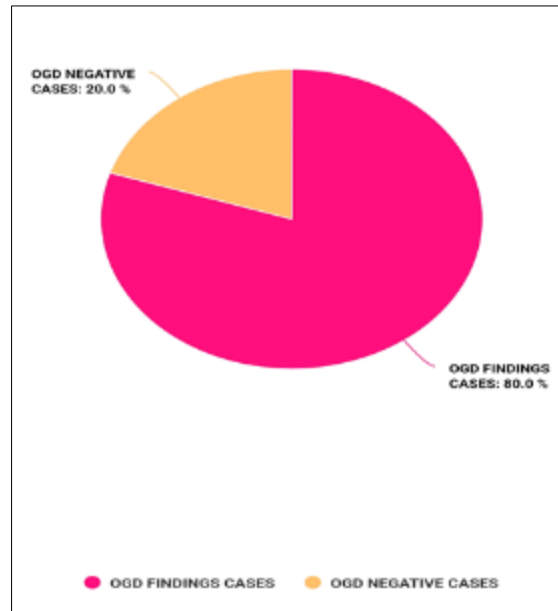


Figure 4 Incidence Ofogd Findings

30 patients participated in this study. Pancreatitis patients who underwent OGD, 24 patients(80%) had positive results in the upper gastrointestinal tract and 6 patients(20%) had a negative OGD. 6 in this series of the cases in the study group the normal study was on endoscopy. Patients with significant OGD findings have gastritis 16 cases(53.3%), the most frequent finding was followed by gastric ulcer 12 cases(40%). There is no OGD related complications were observed during the study.

CT severity index = CT grade + necrosis score. Pancreas necrosis associated with internal changes in the pancreas , peripancreatic adipose tissue inflammatory changes and focal pancreatic enlargement was observed in 1 case (score 5). Pseudo cyst associated with focal enlargement of the pancreas in 1 cases (score 4).

Table 4 OGD findings

Lesion	No.of cases	Percentage
Total	30	100
Esophageal lesion	3	10
Gastritis	16	53.3
Duodenitis	2	6.7
Gastric Ulcer	12	40%
Single/Multiple	3/9	
Size>1cm	1	
Body	2	
Antrum	7	
Body & Antrum	3	
Duodenal ulcer	4	13.3%
Single/multiple	1/3	
Bulb	1	

Second part	2	
Bulb and second part	1	
Pseudocyst	1	3.3%
Normal	6	

4. Discussion

In this prospective observational study, we assessed the prevalence of upper gastrointestinal mucosal lesions and their properties in acute

Table 5 CT Findings in Acute Pancreatitis

Pancreatic inflammation	Score	Cases
Normal pancreas	0	0
Enlargement of pancreas	1	21 (70%)
Peri-pancreatic inflammation	2	10 (33.3%)
Single fluid collection	3	1 (3.33%)
>1acute peri-pancreatic fluid colletiin	4	0
PANCREATIC NECROSIS		
None	0	0
<30%	2	1(3.33%)
30-50%	4	0
>50%	6	0

Pancreatitis. Pancreatitis is an inflammatory disease of the pancreatic ducts to a clinical spectrum ranging from mild local manifestations of serious systemic complications.

Pancreatitis due to unregulated activation pancreatic enzymes that can cause pancreatic extra complications due to persistent hypovolemia, a decreased intravascular volume and multiple organs failure In recent studies, 65% of patients are acute acute pancreatitis was diagnosed in the gastrointestinal tract lesions of the mucous membrane. In our study, the prevalence of mucous membranes, the number of lesions is high and close to previous studies. Pressure ulcers occurs in approximately 70 to 90 percent of critically ill patients. We found a significant relationship between mucosal abnormalities of the upper gastrointestinal tract and acute pancreatitis and 90% of patients have them anomalies. In our study population, pancreatitis due to alcoholism was more common than cholelithiasis (90% vs. 7.5%) and alcoholism seems to be more common among men. The frequency of occurrence has increased about acute pancreatitis in recent years. This increase may be due to alcohol consumption. Patients with alcoholic pancreatitis are usually men, belong to the younger age group and are is considered a milder form of the disease. The the incidence of ulcer disease was significantly higher increased in male patients with acute pancreatitis. There are more male patients with acute pancreatitis in the study susceptible to Associated Gastric Mucosal Lesion probably due to smoking or smoking unidentified factors. The etiologies of pancreatitis are not related. Existence or location of Associated Gastric Mucosal Lesion. Immediate reasons pancreatitis in this study was about the same with previous studies. Many studies have emphasized the role of upper gastrointestinal endoscopy in the presence of overlapping upper gastrointestinal symptoms. The majority, the usual mucosal lesion was gastritis followed by gastritis injury in this study. Current research shows that Importance of Peptic Ulcer Disease in patients with acute pancreatitis was relatively high (53.3%). Because the effect Peptic Ulcer Disease is known to occur in about 5% of the general population, with recent data showing a prevalence of 53.3% in our data was high, so Peptic Ulcer Disease appears to be associated with acute pancreatitis. Various lesions such as esophagitis, Gastritis and duodenitis are also considered in the study that increases the incidence of OGD (90%) than other studies. Other studies also showed that more more than half of patients with acute pancreatitis complicated by lesions of the mucous membrane of the upper gastrointestinal tract. Acute

Gastrointestinal lesions are usually superficial erosions that are generally scattered and mostly localized abdominal wall and body region rarely present in the antrum or duodenum, Unlike other studies in our study lesions are found mostly in the antrum region (70%). In this study, gastritis 16cases (53.3%) was the most common a common finding in OGD. The next most common was gastric ulcer 12cases(40%). in our study, while gastric ulcer was the most a common finding in previous studies. In our study, esophageal lesions were the rarest a finding in the series, 10% of patients developed esophageal ulcers, which was higher than the present study. No OGD related complications occurred during the study. Recent studies have also confirmed this some systemic cytokine is released by inflammation pancreas (eg tumor necrosis factor, interleukin-6, etc.) can also play an important role in the digestive system mucosal ischemia, but the detailed mechanism remains Inconclusive. It is known that abdominal CT can be used as an indicator of the severity of the prognosis acute pancreatitis. In acute pancreatitis, most complications occur in patients with severe pancreatitis (Balthazar grades D and E on CT scan). In our study there is no relationship between lesions of the mucosa of the alimentary canal with severity of pancreatitis. Out of 30 in this study patients with acute pancreatitis who underwent OGD, 1patients (3.3%) had a pseudocyst that was similar to Maringhin with 5.2 cases of pancreatitis indicates pseudocyst formation. Endoscopy can help to start enteral feeding earlier patients with acute pancreatitis. In this prospective study they found that early endoscopy and acid suppression therapy may encourage early initiation of enteral feedin in patients with acute pancreatitis and also reduces the need to opiates.

Limitation

Our study has some limitations. There is the possibility of selection bias, which is a common problem all studies involving volunteers. Subjects which with voluntary endoscopy there may be reason to suspect this they have a concomitant stomach ulcer. Small the number of patients finally enrolled. Abandonment in critically ill patients who have not undergone endoscopy, which affected the exact effect of Peptic Ulcer Disease, but it would result in an underestimation of Peptic Ulcer Disease prevalence because some of those patients had the opportunity to get Peptic Ulcer Disease severe acute pancreatitis. The endoscopies were performed on days 1-5. the day after that admission. We presented it the other day to take by oral Endoscopies are performed on different days. The course of the disease can have different findings. Mucous membrane lesions may appear days later.

5. Conclusion

Esophagitis, gastric and duodenal ulcers are common endoscopic findings in acute pancreatitis. They are not correlated with severity of pancreatitis.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of ethical approval

The study was approved by the Institutional Ethics Committee.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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