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Original Research Article

TO STUDY THE INCIDENCE OF GALL STONE PANCREATITIS AND ALCOHOLIC PANCREATITIS OUR INSTITUTION

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Abstract
Background: The most important aetiological factors for acute pancreatitis are either biliary tract stone disease or alcohol, which account for approximately 75-80% of all cases of acute pancreatitis
Methods: This study was conducted in the department of surgery, RNT Medical College and Maharana Bhupal Govt. Hospital, Udaipur. A total of 35 cases of acute pancreatitis were studied
Results: In our study of 35 cases of acute pancreatitis, 14(40%) patient had alcoholic pancreatitis, and 13(37.2%) patient had gall stone pancreatitis.
Conclusion: Prevalence of Alcohol abuse and gall stones were almost equal frequency.
Keywords: Risk factor, Pancreatitis, Gall sone

Introduction

The human pancreas is located retroperitoneally in the upper abdomen, behind and below the stomach, and is connected to theintestinal tract by the duct of Wirsung, the major pancreatic duct. This joins the common bile duct prior to the ampulla of Vater, after which the common duct perforates the medial side of the second portion of the duodenum at the major duodenal papilla (Lankischet al., 1998).

Physiology

In order to understand different courses in acute pancreatitis and the development of complications knowledge of pancreatic physiology and pathophysiology is essential.[1]
The human pancreas consists of two parts, the exocrine and the endocrine pancreas. The exocrine part consists of acinar and ductalcells, and comprises approximately 85% of the mass of the pancreas.[2]
The acinar cells produce proteolytic enzymes, lipolytic enzymes, amylolytic enzymes and nucleases needed for digestion of food. Thedigestive enzymes are secreted as in active proenzymes including trypsinogen, chymotrypsinogen, proelastase, phospholipase A2 and procarboxypeptidase A and B.[3]

Materials and Methods

This study was conducted in the department of surgery, RNT Medical College and Maharana Bhupal Govt. Hospital, Udaipur. A total of 35 cases of acute pancreatitis were studied.

Inclusion Criteria:

The diagnostic criteria for acute pancreatitis were those defined by the 2006 AP Guidelines, as the presence of at least two of the following features (Banks PA, 2006).
1) Characteristic abdominal pain;
2) Elevation over 3 times the upper normal limit of serum amylase/ lipase;
3) Characteristic features on computer tomography (CT) scan.

Exclusion Criteria:

Patients of chronic pancreatitis were excluded from this study.
Detailed clinical evaluation of all these patients was done and following data were recorded:

- Detailed history of the patient, with special emphasis on symptoms of acute pain abdomen, nausea vomiting.
- History of co morbid conditions, including gall stone, trauma,
- History of personal habits, including dietary history, history of alcohol intake.
- General Physical examination, with special emphasis on presence of fever, hypovolemia and shock.
- Abdominal examination, including presence of tenderness and/or lump in epigestrium.
- Grey turner's sign (bruising of the flanks).

- Cullen's sign and (superficial edema and bruising in the subcutaneous fatty tissue around the umbilicus).
- Mayo-Robson's sign (pain while pressing at the top of the angle lateral to the Erector spinae muscles and below the left 12thrib (left cost vertebral angle).

➢ All the patients were investigated for basic investigations like:

Complete Blood Count, Blood Sugar, Blood Urea, Serum Creatinine, Urine Routine and Microscopy

➢ Radiology: X-ray chest and flat plate abdomen, ultra Sonography abdomen and pelvis. CT scan of abdomen and pelvis, MRI of abdomen and pelvis.

➢ Specific Investigations:

- Serum amylase
- Serum lipase
- Serum LDH
- Serum calcium

These patients were evaluated on Ranson criteria

Results:

The incidence of acute pancreatitis was highest in the 4th decade (25.70%) followed by 5th decade (20%) and then the 6th decade (17.14%). Incidence was less in both the extremes of ages. The youngest patient in the study was 17 years and the eldest was 72 years. 71% of the cases were male and 28 % were female. So male to female ratio in our study was about 5:2.

Table 1: Prevalence of gall stone

Cholelithiasis	No. of patients	Percentage
Present	13	37.1%
Absent	22	62.9%
Total	35	100%

This table shows that out of 35 cases of acute pancreatitis 13(37.1%) patient had gall stone pancreatitis.

Table 2: Prevalence of alcohol

	No. of patients	Percentage
Alcohol	14	40%
Cholelithiasis	13	37.1%
Other	8	22.9%
Total	35	100%

This table shows that out of 35 cases of acute pancreatitis, 14(40%) patient had alcoholic pancreatitis.

Discussion

In our study of 35 cases of acute pancreatitis, 14(40%) patient had alcoholic pancreatitis, while 13(37.2%) patient had gall stone pancreatitis. In 8(22.8%) patient cause was undetected.

According to J H Ranson (1985)[4] the etiology of pancreatitis was prolonged alcohol abuse in 50(60%) patients, gallstones in 12(14%), alcohol and gallstones both in 5(6%), miscellaneous or unknown in 16 (19%) patients.
Bohidaret al. (2003)[5] found the causes of pancreatitis were gallstones in 48%, alcohol in 28%, and others in 24% of the patients.
In study by Marco et al. (2011) [6] most common etiology was alcohol consumption (39.3%), followed by gallstones (24.1%). In 31.9% no identifiable cause was found.
In study of Paul et al. (1999)[7] the main Etiology was biliary in 39% patients and alcohol abuse in 33%; other aetiologies were present in 8%, and etiology remained unknown in 20%.

Conclusion

Prevalence of Alcohol abuse and gall stones were almost equal frequency.

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