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TO STUDY THE RISK FACTORS ETIOLOGY OF ACUTE PANCREATITIS

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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, while 13(37.2%) patient had gall stone pancreatitis. In 8(22.8%) patient cause was undetected.
Conclusion: Alcohol abuse and gall stones were main etiological factors with almost equal frequency.
Keywords: Risk factor, Pancreatitis, Gall sone

Introduction

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.[1]

Other causes are infrequent and include a variety of infections, hyper triglyceridaemia, hypercalcaemia, hypothermia, pancreatic and ampullary tumours, exposure to a variety of pancreatotoxic drugs and hereditary pancreatitis.[2]

Acute pancreatitis can also be a consequence of trauma (including iatrogenic damage such as abdominal surgery and ERCP).[3]

Cases without an obvious cause are referred to as idiopathic and should account for less than 20% of all cases, according to guidelines (UK Guidelines, 2005.)

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: Distribution of patients based on causative factor

Cause	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, while 13(37.1%) patient had gall stone pancreatitis. In 8(22.8%) patient cause was undetected.

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)[3] 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)[4] 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) [5] 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)[6] 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

Alcohol abuse and gall stones were main etiological factors with almost equal frequency.

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