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Original Research Article

Clinical profile of patients with pancreatitis

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ABSTRACT

Background: Pancreatitis is an inflammatory process leading to abdominal pain, progressive destruction of the exocrine tissue and in some patients a loss of endocrine tissue as well. However owing to the tremendous reserve of pancreatic function, insufficiency may be at subclinical at least in the beginning of the disease.
Methods: A cross sectional study was conducted which included the patients admitted with pancreatitis. For all the patients, meticulous records will be maintained regarding clinical features, family history of pancreatitis, alcohol intake, dietary habits, and stigmata of alcoholic liver diseases and by performing various investigations. 200 cases admitted, diagnosed to have pancreatitis.
Results: The most common diagnosis was acute pancreatitis (48%) followed by chronic pancreatitis (12%), acute pancreatitis and pseudocyst (12%), acute on chronic pancreatitis (12%), necrotizing pancreatitis (8%) and acute pancreatitis with others (8%).
Conclusions: Overall acute pancreatitis constituted 76%, chronic pancreatitis 12% and acute on chronic pancreatitis 12%.

Keywords: Acute pancreatitis, Acute on chronic pancreatitis, Chronic pancreatitis

INTRODUCTION

Pancreatitis is inflammation in the pancreas associated with injury to the exocrine and endocrine (at times) parenchyma, resulting in clinical manifestations ranging in severity from a mild, self-limited disease to a life-threatening acute inflammatory process, the duration of which can range from a transient attack to a permanent loss of pancreatic function.[1] The diagnosis of acute pancreatitis requires two of the following three features: abdominal pain consistent with acute pancreatitis (acute onset of a persistent, severe, epigastric pain often radiating to the back); serum lipase activity (or amylase activity) at least three times greater than the upper limit of normal; and characteristic findings of acute pancreatitis on contrast-enhanced computed tomography (CECT) and less commonly magnetic resonance imaging (MRI) or transabdominal ultrasonography. Pancreatitis is an inflammatory process leading to abdominal pain, progressive destruction of the exocrine tissue and in some patients a loss of endocrine tissue as well.[1,2] However owing to the tremendous reserve of pancreatic function, insufficiency may be at subclinical at least in the beginning of the disease. As a result, the early diagnosis of pancreatitis is difficult. Natural history as well as the prognosis of the disease remains yet to be defined. A number of situations can precipitate acute pancreatitis. Only a small fraction of patients with these predisposing factors develop the disease.

The mechanism of induction of pancreatitis by these agents is not known. It is unclear that alcohol-induced pancreatitis occurs only after many years of alcohol abuse and not after a single binge in humans not habituated to

alcohol use. Acute pancreatitis is a common cause of acute abdominal pain requiring hospital admission. The attack is mild in about 80% of patients who will show marked improvement within 48 hours. In some 20% of patients however it is often severe with high morbidity and mortality.[3,4] The first 12 hours are extremely important to provide appropriate management which will decrease morbidity and mortality.[5-7] Nearly 80% of cases of acute pancreatitis worldwide are caused by gall stone obstruction and high alcohol intake. Other causes like hypertriglyceridemia and drugs account for the rest. It is necessary to identify the etiology to institute definitive management and to prevent further attacks and to assess the severity for the proper management of patients.

According to a retrospective study conducted by Matar ZA in Arab population, 96 patients with acute pancreatitis is presented.[6] Gall stones were the leading cause. Early confirmation of etiology and endoscopic retrograde cholangiopancreatography (ERCP) within 48 hours with common bile duct (CBD) stones clearance followed by urgent cholecystectomy within 3 to 9 days gave excellent outcome.

METHODS

This was a hospital based study carried out in the department of surgery, to have overview of a spectrum of the cases presenting to the surgical OPD and casualty with pancreatitis. The patients attending surgical OPD and getting admitted in hospital with pancreatitis irrespective of age and sex formed the study subjects. A cross sectional study was conducted which included the patients admitted with pancreatitis. For all the patients, meticulous records will be maintained regarding clinical features, family history of pancreatitis, alcohol intake, dietary habits, stigmata of alcoholic liver diseases and by performing various investigations. 200 cases admitted, diagnosed to have pancreatitis.

Inclusion criteria

- All patients admitted, who have been diagnosed to have both acute and chronic pancreatitis
- Patients of all age groups and both the sex.

Exclusion criteria

- Patients who refused to take part in the study
- Seriously ill patients.

RESULTS

Among 100 study subjects, highest patients were in the age group of 20 - 39 years (51%) followed by 40 - 59 years (36%), less than 20 years (10%) and more than 59 years (3%).

Table 1: Distribution based on age.

Age group	Frequency	Percentage
<20 years	10	10
20 - 39 years	51	51
40 - 59 years	36	36
>59 years	03	03
Total	**100**	**100**

Table 2: Distribution based on gender.

Gender	Frequency	Percentage
Male	80	80
Female	20	20
Total	**100**	**100**

Study subjects composed of both males and females. Males constituted 80% and females 20%.

Table 3: Distribution based on H/o alcohol consumption.

Alcohol	Frequency	Percentage
Yes	90	90
No	10	10
Total	**100**	**100**

History of alcohol consumption was found in 90% of study subjects.

Table 4: Distribution based on H/o gall stones.

Gall stones	Frequency	Percentage
Yes	04	04
No	96	96
Total	**100**	**100**

History of gall stones was found in 4% of study subjects

Table 5: Distribution based on H/o infections.

Infections	Frequency	Percentage
No	92	92
HIV	07	07
Hbs Ag	01	01
Total	**100**	**100**

Among study subjects, 92% did not have any infections, 7% had HIV and 1% had HbsAg.

The most common diagnosis was acute pancreatitis (48%) followed by chronic pancreatitis (12%), acute pancreatitis and pseudocyst (12%), acute on chronic pancreatitis (12%), necrotizing pancreatitis (8%) and acute pancreatitis with others (8%).

Table 6: Distribution based on diagnosis.

Diagnosis	Frequency	Percentage
Acute pancreatitis	48	48
Acute pancreatitis + pseudocyst	12	12
Acute pancreatitis + others	08	08
Acute on chronic pancreatitis	12	12
Necrotizing pancreatitis	08	08
Chronic pancreatitis	12	12
Total	**100**	**100**

DISCUSSION

Acute pancreatitis is an acute inflammation of the pancreas is an increasingly common abdominal disorder presenting as major surgical challenge to general surgeons worldwide.[1,7,8] It is a complex process which varies from mild self-limiting inflammation to rapidly deteriorating condition which poses a serious threat to life.[9,10] Acute pancreatitis has incidence of around 2.29%.[11] Based on severity, acute pancreatitis can be acute edematous; acute persistent; or acute hemorrhagic necrotizing. Early identification of patients at risk of developing a severe attack has great importance for instituting therapeutic interventions and improved outcome.[12]

In our study, highest patients were in the age group of 20 - 39 years (51%) followed by 40 - 59 years (36%), less than 20 years (10%) and more than 59 years (3%). It is comparable to a study on 35 patients withchronic pancreatitis conducted by Lee MG et al were the age of the patients ranged from 21 to 677.[13] However, it does not correlate with another study conducted byWayne et al on recurrent pancreatitis, were the age at diagnosis ranged from 25 years to 39 years.[14] No age group was found immune to this disease, however, relatively middle age population is more frequently affected. The present study has shown, males constituted 80% and females 20%.

The clinical presentation varies from case to case, depending on severity of acute pancreatitis and any underlying co-morbidities. A patient may present with minor complaints of pain epigastrium on one extreme and multi-organ system failure on the other end.[10] Mild acute pancreatitis presents with minimal organ dysfunction and an uneventful recovery while severe acute pancreatitis is associated with local and systemic complications and higher mortality, thus it is important to identify patients having severe disease.[7]

Categorization of patients based on the type of pancreatitis was made in this study by using ultrasonography which showed 12% cases of chronic pancreatitis, 76% cases of acute pancreatitis and 12% cases of acute on chronic pancreatitis.

Although pain abdomen is the most common symptom of pancreatitis, no specific features easily distinguishes pain caused by pancreatitis, from that caused by other abdominal conditions. In this study abdominal pain was the presenting symptom in all the patients with acute and acute on chronic pancreatitis. This correlates with a study conducted by Lee MG et al in which 30(86%) patients out of 35 cases had abdominal pain.[13] Also in this study 16 out of 31 chronic pancreatitis patients did not have pain. Furthermore, this also correlates with a study by Kalthoff L et al were painless disease was identified in 16% of alcoholic patients and 23 % of non-alcoholic patients.[14,15]

The site of abdominal pain may also vary in patients with pancreatitis. In our study, the most common site of pain was epigastrium (89.3%) followed by right hypochondrium (5.9%) and left hypochondrium (4.8%). In 80.9% patients there was history of radiation of pain to the back. 19.1% patients experienced pain radiating to other areas. However, this does not correlate with a study conducted by Lankisch PG et al, where 68 % of patients had pain predominantly in the epigastric region, 32 % in the right hypochondrium, 50 % in the left hypochondrium and 25% in the hypogastric region.[16]

CONCLUSION

The most common diagnosis was acute pancreatitis (48%) followed by chronic pancreatitis (12%), acute pancreatitis and pseudocyst (12%), acute on chronic pancreatitis (12%), necrotizing pancreatitis (8%) and acute pancreatitis with others (8%)

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REFERENCES

1. Harada MH, Kunichika. Clinical course and prognosis of chronic pancreatitis. Pancreas. 1987;2:378-85.
2. Worming H. Chronic pancreatitis; pathogenesis. natural history and conservative treatment. Clinical Gastroenterol. 1987;13:871-94.
3. Banks P, Free M. Practice guidelines in acute pancreatitis. Am J Gastroenterol. 2006;101(10):237-400.
4. Bardley EL. A clinically based classification system for acute pancreatitis. Arch Surg. 1993;128(5):586-89.
5. Skaife P, Kingsnorth AN. Acute pancreatitis: assessment and management: Post Grad Med J. 1996;72:277- 83.
6. Matar ZS. Clinical pattern of acute pancreatitis. Internet J Surg. 2007;11(1):39-44.
7. Munsell MA, Buscaglia JM. Acute pancreatitis. J Hosp Med. 2010;5:241-50.

8. Bhattacharya S. The pancreas. In: Russel RC, Williams NS, Bulstrode CJ, editors. Bailey and Love's short practice of surgery. 25th ed. London: Edward Arnold; 2008:1130-53.
9. Mofidi R, Patil PV, Suttie SA, Parks RW. Risk assessment in acute pancreatitis. Br J Surg. 2009;96:137-50.
10. Yeung Y, Yeung KLB, Wai CYA. APACHE system is better than ranson system in the prediction of severity of acute pancreatitis. Hepatobiliary Pancreat Dis Int. 2006;5:294-9.
11. Barreto SG, Rodrigues J. Acute pancreatitis in Goa: a hospital based study. J Indian Med Assoc. 2008;106:575-6.
12. Eshy AS, Abolfotouh MA, Nawar E, Sabib AA. Ranson's criteria for acute pancreatitis in high altitude: do they need to be modified? Saudi J Gastroenterol. 2008;14:20-3.
13. Lee MG, Chun A, Miles A, Terry SL, Royes CA. Chronic pancreatitis in Jamaica. West Indian Med J. 1992;4(12):61-3.
14. Wayne M, Delman KA, Kurt T, Grossi R, Sabatini M, Cooperman A. Autoimmune pancreatitis; unveiling a hidden entity. Arch Surg. 2005;140:1104-7.
15. Kalthoff L, Layer P, Clain J, Magio D . The course of alcoholic chronic pancreatitis. Dig Dis Sci. 1984;29:953.
16. Lankisch PG, Happe D, Oho J. Natural course in chronic pancreatitis: Pancreatic exocrine and endocrine insufficiency and prognosis of the disease. Digestion. 1993;54:148-55.

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