Course of Alcoholic Pancreatitis and Management with Minimal Necessary Investigation without Antibiotics

Candy Priyadarshini

1Department of General Surgery, Sree Balaji Medical College & Hospital (Affiliated to Bharath Institute of Higher Education and Research), Chennai, Tamil Nadu, India.

Author’s contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

ABSTRACT

A total of 50 patients who presented during the period of 24 months (October 2013 to October 2015) were studied. In this study, age of the patients ranged from 20 - 60 years and most of patients are between the age group 30- 40 years, as alcohol consumtion was more in this age group. The present study has shown that alcoholic pancreatitis is more common in males. There are no females in this study. Because intake of alcohol is more common in males. Serum amylase and lipase are markers that are elevated in episodes of pancreatitis. Prophylactic usage of antibiotics in alcohol induced pancreatitis has no role. Over 97% of alcohol-induced pancreatitis responded well to the management without antibiotics.

Keywords: Pancreatitis; inflammation; necrosis; antibiotics.

1. INTRODUCTION

Acute pancreatitis is basically an inflammation in the pancreas which can be of various reasons. The severity of inflammation ranges from mild inflammation to critical diseases leading to pancreatic necrosis. It is also reported top cause multiple organ failure, high mortality rate. The
clinical outcome is greatly increased in recent times as there is a constant improvement on its diagnosis.

1.1 Causes of Acute Pancreatitis

- Alcohol
- Biliary tract disease
- Obstructive causes
- Choledocholithiasis
- Ampullary carcinoma or pancreatic malignancy
- Papillary obstruction by worms/foreign bodies
- Pancreas divisum with minor duct obstruction
- Choledochocele
- Duodenal diverticula at periampullary region

The clinical outcome has improved in recent times because of consistent improvisations in the diagnostic methods [1-2]. Hence this study aims to determine the etiopathological factors for the acute pancreatitis.

2. MATERIALS AND METHODS

Study area: Sree Balaji Medical College and Hospital, Chrompet - 600 044.

Duration of Study: Study conducted over a period of two years.

The investigator met and sought the help of staff and head of the concerned departments (Medicine and Surgery) for the conduct of the study. Investigator used to visit the concerned departments and screen patients (both inpatients and out patients). For all the patients, meticulous records were maintained regarding clinical features, family history of pancreatitis, alcohol intake, dietary habits, stigmata of alcoholic liver diseases and by performing various investigations like blood routine, serum amylase, serum LDH, serum calcium, and radiological investigations like plain X ray abdomen, abdominal ultrasonography and CT scan.

2.1 Inclusion Criteria

All patients attending medical and surgical wards of SBMCH and diagnosed to have acute pancreatitis with history of alcohol intake. Male patients with history of alcohol irrespective of previous episodes of acute pancreatitis with no complications.

2.2 Exclusion Criteria

1. Known case of alcohol induced pancreatitis with complications in the previous episodes.
2. Patients who refuse to take part in the study.

All patients who were screened for past two years were taken for the study. All meticulous records were maintained regarding clinical features, family history of pancreatitis, alcohol intake, dietary habits, stigmata of alcoholic liver diseases and by performing various investigations like blood routine, serum amylase, serum LDH, serum calcium, and radiological investigations like plain X ray abdomen, abdominal ultrasonography and CT scan.

3. RESULTS

Alcoholic pancreatitis is more common in male and there are no female in this study because the incidence of alcohol intake is more common in males at the age group of 30 - 39 years than in females. The study shows the level of serum amylase and serum lipase does not correlate with the severity of the disease. 48% patients had > 20 fold rise in serum amylase and serum lipase. 52% patients > 5 folds rise in serum amylase and serum lipase. When alcohol induced pancreatitis patients are kept in NPO till abdominal pain reduces and bowel sounds heard. 58% patients were started after 40 hours 34% patients were started after 30 hours, 2% patients were started after 3 days and 2% patients were started after 56 hours.

Fig. 1. Beginning oral intake
4. DISCUSSION

Out of 28,765 patients screened for pancreatitis during the study period of two years in Medical and Surgical departments, 50 cases were diagnosed to have alcohol induced acute pancreatitis. Overall incidence of acute pancreatitis was found to be 1.73 cases/1000/year. A study conducted by Spanier BW et al. [3-9] an incidence of 0.079 cases per 1,000 person were seen. Blood investigations which include TC, DC, Hb, serum amylase and serum lipase alcohol induced pancreatitis is distinguished from other abdominal conditions. A similar study conducted by Lee MG et al in which 30(86%) patients out of 35 cases had abdominal pain. A study conducted by King et al., 1995, also concluded that appropriate history with ratio levels of amylase and lipase with USG abdomen to rule out other conditions. Serum amylase and lipase are one of the markers which are elevated in episodes of pancreatitis. Levels of serum amylase and serum lipase does not correlate with the severity of the disease. Similar study conducted with 180 patients in the Medical University of Shanghai Jiao Tong had similar reports regarding the levels of serum amylase and serum lipase.

Ultrasound results revealed that the other features like pseudocysts, calcified pancreas and dilated bile duct were also present in few patients with alcoholic pancreatitis. A similar study conducted by S Wilsson, Alcohol related pancreatic damage -med Sci, 1987, with 180 patients and all proven with similar results regarding oral diet in alcohol induced pancreatitis. One of the limitations of our study was the small sample size, because of which the results of the study may not be applicable to the community as a whole. Incidence in this study may show subtle variation as the conduct of the study was restricted to only Medicine and Surgery departments.

5. CONCLUSION

In this study of fifty alcohol induced pancreatitis mostly being male with age between 20-50 years, presented with complaints of abdominal pain, vomiting, nausea and abdominal fullness. During the course of study except for three patients, who developed sterile pancreatic necrosis, ascites, pleural effusion on the third day were started an antibiotics and shifted ICU for further treatment. All the alcohol induced pancreatitis patients responded well to the management without antibiotics and minimal investigations. Hence the study safely proves that the alcoholic pancreatitis can be managed without antibiotics and minimal necessary investigations.

CONSENT

As per international standard or university standard, patient’s written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

The study was approved by the Institutional Ethics Committee.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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