Aetiology of Acute Pancreatitis and Its Management

Saher Irshad¹, Muhammad Bilal Tahir² and Sadaf Zahoor³
¹Doctor in DHQ hospital Sahiwal, Pakistan
Email i.d: saher_irshad93@hotmail.com
²Doctor in Nishtar Hospital Multan, Pakistan
Email i.d: voiceofqmc@yahoo.com
³WMO at DHQ hospital Faisalabad, Pakistan.
Email i.d: sadaf.zahoor777@gmail.com

ABSTRACT

Objective: Objective of this study was to determine causes of acute pancreatitis and its management.

Study design and Duration: It is a retrospective type of study. In which data was taken from July 2017 to December 2017.

Setting: This study was conducted in surgical ward of Services Hospital Lahore Pakistan.

Patients and Methods: In this study 78 cases were included. These patients were reported either in emergency ward or out-patient doors. These cases presented with signs symptoms of acute pancreatitis. After taking history, thorough examination was done and necessary investigations were done and diagnosis of acute pancreatitis was established. A proform was set in which all necessary data of the patient was documented such as age of patient, presenting complaints, signs/symptoms, positive findings on history and examination and investigations. These cases were admitted in the ward and causes were ruled out for acute pancreatitis. They were given proper treatment and outcome was documented. Morbidity and mortality associated with acute pancreatitis was documented. All data was analyzed using Microsoft office and SPSS version 2007. Results were calculated in the form of frequencies and expressed via tables and graphs.

Results: Total 78 cases having acute pancreatitis were studied. These cases were having ages with range of 20-70 years with mean age of 44.8 years. Mostly cases were above 45 years of age. There were 11 cases between age of 20-30 years, 16 cases between 31-40 years of age, 25 cases with age 41-50 years, 20 cases with age 51-60 years and only 6 cases were having age range of 61-70 years. There were 62 male patients and only 16 were female patients. Causes of acute pancreatitis reported were gall stones in 45 cases, idiopathic reason in 16 cases, after ERCP in 7 cases, due to alcohol consumption in 5 cases, due to abdominal trauma in 2 cases and drug induced pancreatitis was found in 3 cases. It was seen that most common cause of pancreatitis was gall stones in this study group and second most common cause is idiopathic. Out of 78 cases 2 patients were died due to severe disease so contributing mortality rate of 2.6%. All other cases survived after proper management and ICU care was given in severely ill cases. As alcoholism is not much common in our country that’s why it was not common cause of acute pancreatitis but in which countries alcoholism is common it may be most common cause there.

Conclusion: Acute pancreatitis is a common surgical disease most commonly occurs due to gall stones. Severity of disease can be measured by APACHE ii or iv scoring system. Early diagnosis and prompt treatment can reduce morbidity and mortality associated with this disease.

Key Words: treatment of acute pancreatitis, Causes of pancreatitis, APACHE scoring system

INTRODUCTION

Pancreatitis is a disease in which pancreatic tissue becomes inflamed and it involves every system of the body. Its morbidity and mortality is high if untreated or delayed treatment given. Overall mortality associated with it is 15%. In delayed presentation of acute pancreatitis patient often presents in toxic condition requiring ICU care. Severity of disease can be measured using APACHE scoring system. It is much useful to for evaluating condition of the patient and helps in determining management plan and also determines outcome of the disease. In chronic pancreatitis patients present with vague symptoms of abdominal pain off and on associated with posture changes, abdominal distension, fever and abdominal mass which is due to formation of pseudo pancreatic cyst. In this study 78 cases were included. These patients were reported either in emergency ward or out-patient doors. These cases presented with signs symptoms of acute pancreatitis. After taking history, thorough examination was done and necessary investigations were done and diagnosis of acute pancreatitis was established. A proform was set in which all necessary data of the patient was documented such as age of patient, presenting complaints, signs/symptoms, positive findings on history and examination and investigations. These cases were admitted in the ward and causes were ruled out for acute pancreatitis. Acute pancreatitis is a common surgical disease most commonly occurs due to gall stones. Severity of disease can be measured by APACHE ii or iv scoring system. Early diagnosis and prompt treatment can reduce morbidity and mortality associated with this disease. They were given proper treatment and outcome was documented. Morbidity and mortality associated with acute pancreatitis was documented. Gold standard investigation in acute pancreatitis is CT scan abdomen. Other investigation is ERCP which is also very useful and provides detailed information about the condition of pancreatic tissue. In ERCP iatrogenic injury may occur making the condition more complicated. ERCP is also a cause of acute pancreatitis when performed...
for removing CBD stones. Out of 78 cases 2 patients were died due to severe disease so contributing mortality rate of 2.6%. All other cases survived after proper management and ICU care was given in severely ill cases. As alcoholism is not much common in our country that’s why it was not common cause of acute pancreatitis but in which countries alcoholism is common it may be most common cause there. If acute pancreatitis is due to CBD stone then ERCP can be performed for removing stone so that pancreatic secretions may be drained and disease may settle down. In gall stones small stones may dislodge and obstruct CBD so causing pancreatitis repeatedly. It may lead to chronic pancreatitis. In this case cholecystectomy and cholecototomy is procedure of choice. Antibiotics, relieve of gut and intravenous fluids are main treatment steps. Main cause of mortality in acute pancreatitis is sepsis so proper antibiotic coverage may prevent sepsis to occur. In these cases ARDS is much common, which is life threatening complication of acute pancreatitis. In this condition immediate mechanical ventilation is life saving. So ventilator support is necessary in the management of severe disease. Proper hospital stay with intensive care is necessary for treatment. Alcoholic patients are at high risk of developing acute pancreatitis in those countries where alcoholism is common. In Pakistan alcoholic use is not common so here it accounts minor percentage of the cases. Abdominal trauma may cause pancreatic injury leading to pancreatitis. They were given proper treatment and outcome was documented. Morbidity and mortality associated with acute pancreatitis was documented. All data was analyzed using Microsoft office and SPSS version 2007. Results were calculated in the form of frequencies and expressed via tables and graphs.

**Results**

Total 78 cases having acute pancreatitis were studied. These cases were having ages with range of 20-70 years with mean age of 44.8 years. Mostly cases were above 45 years of age. There were 11 cases between age of 20-30 years, 16 cases between 31-40 years of age, 25 cases with age 41-50 years, 20 cases with age 51-60 years and only 6 cases were having age range of 61-70 years. There were 62 male patients and only 16 were female patients. Causes of acute pancreatitis reported were gall stones in 45 cases, idiopathic reason in 16 cases, after ERCP in 7 cases, due to alcohol consumption in 5 cases, due to abdominal trauma in 2 cases and drug induced pancreatitis was found in 3 cases. These cases presented with signs symptoms of acute pancreatitis. After taking history, thorough examination was done and necessary investigations were done and diagnosis of acute pancreatitis was established. A proform was set in which all necessary data of the patient was documented such as age of patient, presenting complaints, signs/symptoms, positive findings on history and examination and investigations. These cases were admitted in the ward and causes were ruled out for acute pancreatitis. Main cause of mortality in acute pancreatitis is sepsis so proper antibiotic coverage may prevent sepsis to occur. In these cases ARDS is much common, which is life threatening complication of acute pancreatitis. In this condition immediate mechanical ventilation is life saving. So ventilator support is necessary in the management of severe disease. Proper hospital stay with intensive care is necessary for treatment. It was seen that mast common cause of pancreatitis was gall stones in this study group and second most common cause is idiopathic. Out of 78 cases 2 patients were died due to severe disease so contributing mortality rate of 2.6%. All other cases survived after proper management and ICU care was given in severely ill
cases. As alcoholism is not much common in our country that’s why it was not common cause of acute pancreatitis but in which countries alcoholism is common it may be most common cause there.

![Graph showing age distribution of patients among the study group]

**DISCUSSION**

Pancreatitis is a disease in which pancreatic tissue becomes inflamed commencing an inflammatory response in the whole body involving almost all systems of the body. Its morbidity and mortality is high if untreated or delayed treatment given. Overall mortality associated with it is 15%. In delayed presentation of acute pancreatitis patient often presents in toxic condition requiring ICU care. Severity of disease can be measured using APACHE scoring system. It is much useful to for evaluating condition of the patient and helps in determining management plan and also determines outcome of the disease. In chronic pancreatitis patients present with vague symptoms of abdominal pain off and on associated with posture changes, abdominal distension, fever and abdominal mass which is due to formation of pseudo pancreatic cyst. In this study 78 cases were included. These patients were reported either in emergency ward or out-patient doors. These cases presented with signs symptoms of acute pancreatitis. After taking history, thorough examination was done and necessary investigations were done and diagnosis of acute pancreatitis was established. A proform was set in which all necessary data of the patient was documented such as age of patient, presenting complaints, signs/symptoms, positive findings on history and examination and investigations. These cases were admitted in the ward and causes were ruled out for acute pancreatitis. In this study 78 cases were included. These patients were reported either in emergency ward or out-patient doors. These cases presented with signs symptoms of acute pancreatitis. After taking history, thorough examination was done and necessary investigations were done and diagnosis of acute pancreatitis was established. A proform was set in which all necessary data of the patient was documented such as age of patient, presenting complaints, signs/symptoms, positive findings on history and examination and investigations. These cases were admitted in the ward and causes were ruled out for acute pancreatitis. Main cause of mortality in acute pancreatitis is sepsis so proper antibiotic coverage may prevent sepsis to occur. In these cases ARDS is much common, which is life threatening complication of acute pancreatitis. In this condition immediate mechanical ventilation is life saving. So ventilator support is necessary in the management of severe disease. Proper hospital stay with intensive care is necessary for treatment. It was seen that most common cause of pancreatitis was gall stones in this study group and second most common cause is idiopathic. Main cause of

<table>
<thead>
<tr>
<th>Causes of acute pancreatitis</th>
<th>Number of patients (n)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gall stones</td>
<td>45</td>
<td>57.7</td>
</tr>
<tr>
<td>Post ERCP</td>
<td>7</td>
<td>8.9</td>
</tr>
<tr>
<td>Traumatic</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Drug induced</td>
<td>3</td>
<td>3.8</td>
</tr>
<tr>
<td>idiopathic</td>
<td>16</td>
<td>20.5</td>
</tr>
</tbody>
</table>
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REFERENCES