Risk Factors of Recurrent Acute Pancreatitis

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ABSTRACT
Acute Pancreatitis is one of the acute surgical condition. It is one of the most important differential diagnosis to be considered. The aetiology of pancreatitis is different. Gall stones, alcohol, trauma to abdomen drugs, mumps are some of the aetiology. Most patients who had an attack of pancreatitis having recurrence. This recurrence can be avoided by removing the aetiologiocal factor

AIM: To study the occurrence of recurrent acute pancreatitis and to study the factors affecting recurrent acute pancreatitis

Keywords: Pancreatitis, recurrent, Alcohol.

INTRODUCTION
Acute pancreatitis is one of the common clinical problems in surgical practice. It can mimic many other acute surgical conditions. Clinical presentation may vary from mild pain to severe toxicity and shock. Clinical examination shows tachycardia, tachypnea dehydration. Abdominal examination shows tenderness, guarding and rigidity. Grey sign and cullen sign indicate retroperitoneal bleed. Acute pancreatitis can be interstitial or necrotising. Necrotising variety is more severe with high mortality.

Diagnosis of acute pancreatitis can be made by history, clinical examination and investigations. Serum amylase and lipase more than three times is suggestive of pancreatitis. Ultrasonogram is helpful in diagnosing acute pancreatitis and can pick up gall stones. C T scan is diagnostic and can detect complications. Complication can be systamic or local. Systemic complication can be cardiovascular, renal, pulmonary, metabolic, gastrointestinal, hematological etc. Local complication can be necrosis, abscess, ascites, pseudocyst, pseudo aneurysm, bleeding, thrombosis etc.

Most of the cases of acute pancreatitis having a risk of recurrence. Recurrent pancreatitis is defined as two or more attacks of acute pancreatitis without any evidence of chronic pancreatitis.

In this study we followed up 150 cases of acute pancreatitis admitted in Govt Medical College Kozhikode.

ANALYSIS
In our study total number of patients were 150, out of which 138 were males 92%.

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<tbody>
<tr>
<td>Male</td>
<td>138</td>
<td>92%</td>
</tr>
<tr>
<td>Female</td>
<td>12</td>
<td>8%</td>
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The age group of patients in the study varied from 13 years to 75 years the majority of patients were in the age group between 20 to 40 years.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No of Cases</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>13-20 yrs</td>
<td>25</td>
<td>116.66</td>
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<tr>
<td>21-40</td>
<td>68</td>
<td>45.33</td>
</tr>
<tr>
<td>41-60</td>
<td>44</td>
<td>29.33</td>
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<tr>
<td>&gt;60</td>
<td>13</td>
<td>8.66</td>
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Serum amylase and lipase level were elevated more than 1000IU /L in most of the cases .Random blood sugar > 200 mg% found in 74 patients out of 150 (49%). Hypertriglyceridemia more than 180 mg % found in 73 patients (48 %). among the 150 patients who presented with acute pancreatitis 93 were alcoholic and 60 were smokers .Gall stone disease were seen in 25 patients out of 150. Hypercalcemia seen in 4 patients out of 150 patients.

During the study period recurrence was observed in 34 out of total 150 patients. All the recurrence were observed in males .Most recurrence were seen within 3 months of discharge.

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>No of Cases</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Alcohol</td>
<td>28</td>
<td>82.3</td>
</tr>
<tr>
<td>Gall Stone</td>
<td>6</td>
<td>17.64</td>
</tr>
<tr>
<td>Idiopathic</td>
<td>4</td>
<td>11.76</td>
</tr>
</tbody>
</table>

Among the 93 patients who were alcoholic at initial attack of acute pancreatitis, recurrence was observed in 28 patients (30.10 %). So about one third of the alcoholic patients who had acute pancreatitis had recurrent attack in our study. This association was found to be statistically significant relation between with a value of less than 0.05.

Gall bladder stone disease was the next common cause of recurrence in this study but we couldn't get statically significant relation between gall stones pancreatitis and recurrence of the disease.

Analysis of the risk factors for recurrent episode of pancreatitis revealed that alcoholism was the most common cause seen in 28 out of 34 patients (82.3%). Gall stone disease were observed in 6 out of 34 patients (17.6 %) of which 4 were alcoholic also. No aetiological reason were observed in 4 cases which was grouped as idiopathic variety.

DISCUSSION

The study was conducted in Govt Medical College Calicut. One hundred and fifty patients were included in the study over a duration of 18 months. Out of which 138 were males, 12 were females. when age group were compared the middle age group 21 to 40 years contributed the maximum number 45.3 % followed by 41 to 60 years and 13 to 20 years.

When we analysed various risk factors and laboratory values in an attack of acute pancreatitis alcohol found to be the major risk factor in 93 out of 150 patients .In western study it is found to be gall stone disease is the major risk factor. In our study 25 out of 150 patients gall stone disease is the risk factor out of the total 150 cases who are followed up for a period of one year 34 patients had recurrence during the study period.

In our study alcoholism was found to be the most common cause for recurrence. Among the 25 patients with gall stone disease recurrence was seen in 6 patients. But 4 among these 6 patients were alcoholic also. Idiopathic cause attributed to recurrence in 4 patients.
CONCLUSION
1) Acute pancreatitis is more common in males than females
2) Alcoholism is the leading cause of acute pancreatitis followed by gall stone disease
3) The common age group affected is 20 - 40 years of age
4) Majority population had a very high serum amylase value and lipase value at presentation
5) Male gender is a risk factor for pancreatitis
6) The most common risk factor of recurrent pancreatitis is alcoholism
7) Gall stone disease is a risk factor for recurrent pancreatitis in 17.6% of cases
8) No risk factor is found in 11.7% of patients with recurrent pancreatitis

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