

Outcome of acute biliary pancreatitis

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Abstract

Background: Acute pancreatitis (AP) means sudden inflammation of the pancreas. The present study was conducted to assess outcome of acute biliary pancreatitis. **Materials & Methods:** 58 cases of acute biliary pancreatitis of both genders were enrolled. The mode of clinical presentation, supportive laboratory parameters, findings of imaging studies, and methods of treatment was recorded. **Results:** Age group <20 years had 15, 20-40 years had 10 and 40-60 years had 33 patients. Symptoms were pain recorded in 42, vomiting in 30, tachycardia in 13, fever in 38 and jaundice in 48. Management given was conservative in 20, index cholecystectomy in 24 and ERCP+ sphincterotomy in 14 cases. The difference was significant (P< 0.05). **Conclusion:** Index cholecystectomy of acute biliary pancreatitis has a favourable outcome in the majority of patients.

Key words: Acute pancreatitis, Index cholecystectomy, Outcome

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Introduction

Acute pancreatitis (AP), as suggested by its name, means sudden inflammation of the pancreas. It is clinically characterized by sudden onset of abdominal pain and elevated levels of pancreatic enzymes in the blood. Its incidence ranges from 10 to 50/100,000 per annum. This disease has an overall mortality of approximately 4–6 %, and the mortality increases to 17–39 % in severe cases[1]. Gallstones are the most common cause of acute pancreatitis. Migrating gallstones cause transient obstruction of the pancreatic duct, a mechanism shared by other recognized causes (e.g., endoscopic retrograde cholangio-pancreatography [ERCP]), as well as purported causes (i.e., pancreas divisum and sphincter of Oddi dysfunction)[2]. A recent trial failed to show that sphincter of Oddi dysfunction contributed to post-cholecystectomy biliary pain, and there are no convincing data from controlled trials that either pancreatic sphincter of Oddi dysfunction or pancreas divisum plays a role in acute pancreatitis[3].

Despite a gradual increase in knowledge concerning underlying pathophysiological mechanisms, management is still merely to be considered as organ supportive and primarily not directed against underlying causative mechanisms. Over time, changes in management have been taking place, e.g. a shift towards a more conservative, i.e. a non-surgical, attitude in patients with severe necrotizing pancreatitis[4]. Furthermore, there seems to be consensus on the benefits of using prophylactic antibiotics in severe cases. The improved outcome in patients with acute pancreatitis has, however, often been attributed to general improvements in intensive care, including initial management with fluid resuscitation and thereby improved microcirculation, nutritional concerns and the use of antibiotics[5]. The present study was conducted to assess outcome of acute biliary pancreatitis.

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E-mail: suveerbhargava@hotmail.com**Materials & Methods**

The present study comprised of 58 cases of acute biliary pancreatitis of both genders. All were informed regarding the study and their written consent was obtained.

Data such as name, age, gender etc. was recorded. A diagnosis of acute pancreatitis was made based on clinical presentation, laboratory, and radiological findings. The biliary cause of pancreatitis was ascertained based on ultrasonographic detection of gallstones, a threefold elevation of ALT. The mode of clinical presentation, supportive laboratory parameters, findings of imaging studies, and methods of treatment was recorded. Results were analysed statistically. P value less than 0.05 was considered significant.

Results**Table I Demographic data**

Parameters	Variables	Number	P value
Age group (Years)	<20	15	0.02
	20-40	10	
	40-60	33	
Symptoms	Pain	42	0.05
	Vomiting	30	
	Tachycardia	13	
	Fever	38	
	Jaundice	48	
Management	Conservative	20	0.03
	Index cholecystectomy	24	
	ERCP+ sphincterotomy	14	

Table I, graph I shows that age group <20 years had 15, 20-40 years had 10 and 40-60 years had 33 patients. Symptoms were pain recorded in 42, vomiting in 30, tachycardia in 13, fever in 38 and jaundice in 48. Management given was conservative in 20, index cholecystectomy in 24 and ERCP+ sphincterotomy in 14 cases. The difference was significant (P< 0.05).

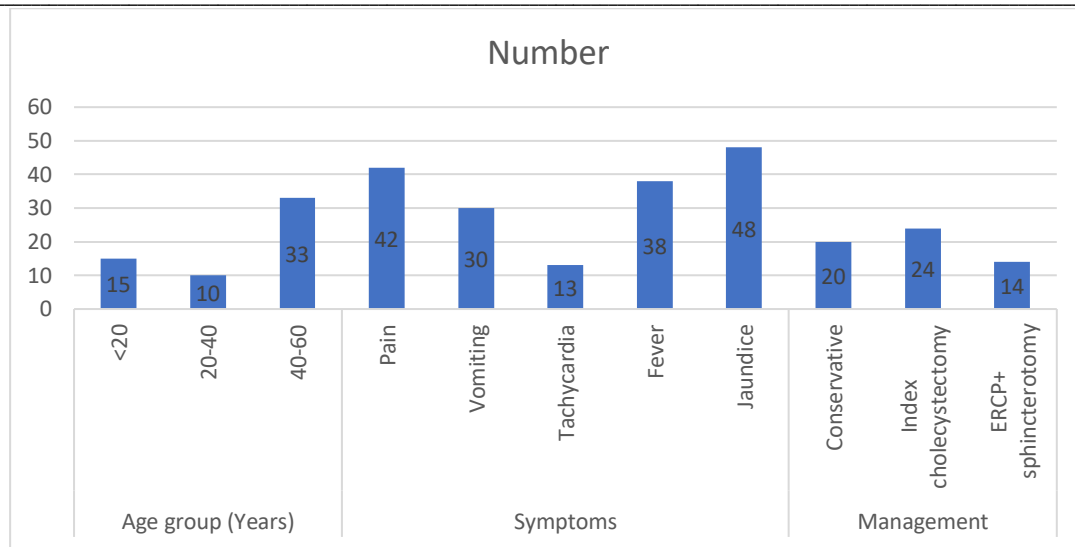


Fig 1: Demographic data

Table 2: Outcome of the study

Outcome	Number	P value
Improvement without complications	30	0.01
Improvement with complications	26	
Mortality	2	

Table 2 shows that outcome was improvement without complications in 30, improvement with complications in 26 and mortality in 2 cases. The difference was significant (P< 0.05).

Discussion

Acute pancreatitis (AP) refers to sudden inflammation of the pancreas. It is clinically characterized by sudden onset of abdominal pain and elevated levels of pancreatic enzymes in the blood. Its incidence ranges from 10 to 50/100,000 per annum[6]. This disease has an overall mortality of approximately 4–6 %, and the mortality increases to 17–39 % in severe cases[7]. Majority of patients with biliary pancreatitis recover without significant sequelae. However, about 15–30 % cases have severe episodes requiring a multidisciplinary care[8]. The common complications are local (necrosis, pseudocyst formation, abscesses, hemorrhage) and systemic (pleural effusion, adult respiratory distress syndrome, renal insufficiency, multiorgan failure)[9]. The present study was conducted to assess outcome of acute biliary pancreatitis.

We found that age group <20 years had 15, 20-40 years had 10 and 40-60 years had 33 patients. Symptoms were pain recorded in 42, vomiting in 30, tachycardia in 13, fever in 38 and jaundice in 48. Management given was conservative in 20, index cholecystectomy in 24 and ERCP+ sphincterotomy in 14 cases. Manandhan et al[10] conducted a retrospective analysis of the patients managed with Acute Biliary Pancreatitis. A total of 45 cases had Acute Biliary Pancreatitis suggesting a prevalence of 28 %. The mean age was 45±10 year. 39 patients (86.6 %) were treated with conservative management. 23 patients (54%) had an uneventful recovery without any complications. 21 patients (46 %) developed some form of complications but recovered successfully. Mortality was seen in only one patient in the conservatively treated group. Conservative management of Acute Biliary Pancreatitis has a favourable outcome in the majority of patients with acceptable morbidity and mortality. Definitive management can be safely performed during index admission where possible.

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at the Dept. of Surgery. Management, outcome and recurrence rate were recorded. Incidence, including recurrences, was 300 per million per year; 21% of patients had recurrent (> or =2) attacks. In relapsing disease, two-thirds of patients had the first attack within 3 months. Mortality decreased over the period studied, but overall it was 4.2%; mortality in relapsing attacks was 2.5%, related to multiple organ dysfunction (MODS) in 67% and occurring within the first week in 36%. Despite a conservative approach in the management of acute pancreatitis, mortality is still substantial, frequently occurs early after admission, is associated with MODS and is also seen in relapsing disease. Early cholecystectomy and bile duct clearance could decrease recurrent attacks of biliary pancreatitis. We observed that outcome was improvement without complications in 30, improvement with complications in 26 and mortality in 2 cases. Hernandez et al[12] determined the prevalence of recurrence of gallstone pancreatitis, its clinical features, and the presence of prognostic factors of recurrence. 233 patients admitted with acute gallstone pancreatitis (AGP) were prospectively studied. Patients were divided into two groups: recurrent and nonrecurrent group. Clinical, analytical, radiological, prognostic parameters, and severity (Atlanta criteria) were assessed. Two hundred and eighty-six attacks were identified. Forty-two patients (18.2%) recurred, suffering 53 recurrent attacks, which took place within 30 days in 23.3%. Patients who did not undergo surgery after the first attack had 31-fold risk of recurrence. In patients not operated, recurrence was more frequent if ES was not performed (37.04%vs 0%, p= 0.019). Among patients with surgical risk, none who recurred underwent ES, compared with 27.9% of those who did not recur. Patients in the nonrecurrent group underwent cholecystectomy within the first 30 days or ES more frequently (31.2% vs 7.3%, p= 0.001).

Conclusion

Authors found that index cholecystectomy of acute biliary pancreatitis has a favourable outcome in the majority of patients.

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