

To study the effectiveness of conservative management of acute pancreatitis

¹Dr. Ajay Pal, Department of General Surgery, S.P. Medical College & Associated group of hospitals, Bikaner, Rajasthan

²Dr. Indira, Department of Pediatrics, S.P. Medical College and P.B.M., Associated Group of Hospitals, Bikaner, Rajasthan

Corresponding Author: Dr. Indira, Department of Pediatrics, S.P. Medical College and P.B.M., Associated Group of Hospitals, Bikaner, Rajasthan

Citation this Article: Dr. Ajay Pal, Dr. Indira, “To study the effectiveness of conservative management of acute pancreatitis”, IJMSIR- October - 2021, Vol – 6, Issue - 5, P. No. 85 – 87.

Type of Publication: Original Research Article

Conflicts of Interest: Nil

Abstract

Background: Acute pancreatitis is the leading cause of hospitalization for gastrointestinal disorders in the United States, with more than 280,000 hospitalizations each year.

Methods: This study was conducted in the department of surgery on total of 35 cases of acute pancreatitis were studied

Results: 50 cases of acute pancreatitis, 37(74.00%) patient were given Octreotide therapy. 13(26.00%) patient out of 50 patients were not given Octreotide therapy.

Conclusion: Thus it may be concluded that most of these cases can be managed conservatively and the use of Octreotide therapy helps in the favourable outcome.

Keywords: Conservative, pancreatitis, Managed

Introduction

Acute pancreatitis is the leading cause of hospitalization for gastrointestinal disorders in the United States, with more than 280,000 hospitalizations each year.¹

The average length of stay at US hospitals in 2010 was estimated to be 5 days, at an aggregate cost of \$2.9 billion. Mortality ranges from 3% for patients with

interstitial (edematous) pancreatitis² to 15% for patients who develop necrosis.^{2,3} As the rate of hospitalization for acute pancreatitis continues to increase,^{4,5} so does the demand for effective management.

Indications for surgical intervention include the presence of gallstones in the gallbladder or biliary tree, infected necrosis preferably for more than 4 wk after antibiotics if stable, and necrosectomy in symptomatic patients⁶

Materials and Methods

Inclusion Criteria: The diagnostic criteria for acute pancreatitis were those defined by the 2006 AP Guidelines, as the presence of at least two of the following features (Banks PA, 2006).

1. Characteristic abdominal pain
2. Elevation over 3 times the upper normal limit of serum amylase/ lipase
3. Characteristic features on computer tomography (CT) scan.

Exclusion Criteria: Patients of chronic pancreatitis were excluded from this study.

Detailed clinical evaluation of all these patients was done and following data were recorded:

- Detailed history of the patient, with special emphasis on symptoms of acute pain abdomen, nausea vomiting.
 - History of co morbid conditions, including gall stone, trauma,
 - History of personal habits, including dietary history, history of alcohol intake.
 - General Physical examination, with special emphasis on presence of fever, hypovolemia and shock.
 - Abdominal examination, including presence of tenderness and/or lump in epigastrium.
 - Grey turner's sign (bruising of the flanks).
 - Cullen's sign and (superficial edema and bruising in the subcutaneous fatty tissue around the umbilicus).
 - Mayo-Robson's sign (pain while pressing at the top of the angle lateral to the Erector spinae muscles and below the left 12th rib (left cost vertebral angle).
- All the patients were investigated for basic investigations like:

Complete Blood Count, Blood Sugar, Blood Urea, Serum Creatinine, Urine Routine and Microscopy

- Radiology: X-ray chest and flat plate abdomen, ultra Sonography abdomen and pelvis. CT scan of abdomen and pelvis, MRI of abdomen and pelvis.

- Specific Investigations
- Serum amylase
- Serum lipase
- Serum LDH
- Serum calcium

These patients were evaluated on Ranson criteria

Results

Table 1: Distribution of patients based on management and outcome (n=50)

	No. of patients	Percentage
Octreotide therapy	37	74.00
Not given	13	26.00
Total	50	100.00

This table shows that out of 50 cases of acute pancreatitis, 37(74.00%) patient were given Octreotide therapy. 13(26.00%) patient out of 50 patients were not given Octreotide therapy.

Table 2: Showing Hospital stay in our study population

Hospital stay	No. of patients	Percentage
< 10 days	24	48.00%
10 to 30 days	17	34.00%
>30 days	7	14.00%
Total	50	100%

24 patients (48.00%) stayed less than 10 days, 17 patients (34.00%) stayed between 10 to 30 days and 7 patients (14.00%) stayed for more than 30 days.

Discussion

In this study out of 50 cases of acute pancreatitis, 37(74.00%) patient were given Octreotide therapy. 13(26.00%) patient out of 50 patients were not given Octreotide therapy.

Andriulli A et al. (1998) observed that in mild AP, no agent proved of value. In severe acute pancreatitis Octreotide was beneficial in improving the overall mortality.⁷

Fiedler et al. (1996)⁸ observed in study of 39 patients with necrotizing pancreatitis. The treatment group received 100 micrograms intravenous Octreotide three times daily for 10 days, in addition to the standard intensive care therapy. There was no difference in the development of renal, hepatic, gastrointestinal,

hemostatic, neurologic, or local complications. But the frequency of the adult respiratory distress syndrome and circulatory shock was significantly lower in the treatment group. Mortality was 26% in the Octreotide group and 61% in the control group. Study showed a beneficial effect of Octreotide in patients with severe necrotizing pancreatitis and pulmonary failure.

Paran H (2000)⁹ observed in study with Octreotide (0.1 mg subcutaneously three times a day). The complication rate was lower in the treatment group with regard to sepsis (24% vs. 76 %,) and ARDS (28% vs. 56 %). The hospital stay was shorter in the treatment group (20.6 vs. 33.1 days). Two patients died in the treatment group and eight in the control group. These results suggest that Octreotide may have a beneficial effect in the treatment of severe acute pancreatitis.

Conclusion

Thus it may be concluded that most of these cases can be managed conservatively and the use of Octreotide therapy helps in the favourable outcome.

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