

## TO STUDY THE MORBIDITY AND MORTALITY OF ACUTE PANCREATITIS

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### Abstract

**Background:** Acute pancreatitis is a protean disease capable of wide clinical variation ranging from mild discomfort to apocalyptic prostration

**Methods:** This study was conducted in the department of surgery, RNT Medical College and Maharana Bhupal Govt. Hospital, Udaipur. A total of 35 cases of acute pancreatitis were studied

**Results:** Out of these 35 patients, 25(71.42%) had favourable outcome, while 4(15.4%) patient had complication (pancreatic pseudocyst in 3, and recurrence after 7 months in 1 patient), 3(8.57%) patient died and 3 (8.57%) patient could not be followed up due to non-compliance of patient.

**Conclusion:** We concluded that history, clinical examination, radiological and blood investigations are helpful to come to a conclusive diagnosis and severity of acute pancreatitis and most of these cases can be managed conservatively and the use of Octreotide therapy helps in the favourable outcome.

**Keywords:** Conservative, Pancreatitis, Outcome

### Introduction

Acute pancreatitis is a protean disease capable of wide clinical variation ranging from mild discomfort to apocalyptic prostration. The inflammatory process may remain localized in the pancreas, spread to the regional tissues or even involve remote organ systems. Acute pancreatitis is defined as pancreatic inflammation that may be followed by clinical and pathological restitution of the gland once the pathological cause is removed.<sup>1</sup>

Moynihan (1925) aptly described the dramatic nature of acute pancreatitis as “the most terrible of all calamities that occur in connection with the abdominal viscera”<sup>1</sup>. The suddenness of its onset, the illimitable agony which accompanies it and the mortality caused by it renders it one of the most formidable catastrophes.<sup>2</sup>

Depending on its severity it can have severe complications and high mortality despite treatment. While mild cases are often successfully treated by conservative management, severe cases may require admission to intensive care unit or even surgery (often requiring more than one intervention) to deal with the complications of the disease process.<sup>3</sup>

### Materials and Methods

This study was conducted in the department of surgery, RNT Medical College and Maharana Bhupal Govt. Hospital, Udaipur. A total of 35 cases of acute pancreatitis were studied.

### 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 12<sup>th</sup> 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

The incidence of acute pancreatitis was highest in the 4<sup>th</sup> decade (25.70%) followed by 5<sup>th</sup> decade (20%) and then the 6<sup>th</sup> decade (17.14%). Incidence was less in both the extremes of ages. The youngest patient in the study was 17 years and the eldest was 72 years. 71% of the cases were male and 28 % were female. So male to female ratio in our study was about 5: 2.

**Table 1: Distribution of patients based on outcome (n=35)**

Outcome	No. of patients	Favourable outcome	Complication	Death	Could not be observe
Number of patients	35	25	4	3	3
Percentage	100.00	71.42	11.43	8.57	8.57

Out of these 35 patients, 25(71.42%) had favourable outcome, while 4(15.4%) patient had complication (pancreatic pseudocyst in 3, and recurrence after 7 months in 1 patient), 3(8.57%) patient died and 3 (8.57%) patient could not be followed up due to non-compliance of patient

### Discussion

In this study out of 35 cases of acute pancreatitis, 26(74.28%) patient were given Octreotide therapy. 9(25.7%) patient out of 35 were not given Octreotide therapy.

McKay C *et al.* (1997)<sup>3</sup> showed that out of Fifty-eight patients with moderate or severe acute pancreatitis who were randomized to receive Octreotide, 40 micrograms/h, by continuous i.v. infusion for 5 d, or placebo in addition to standard supportive therapy. There was no significant difference in the incidence of complications (54% Octreotide group and 40% placebo group) or mortality (Octreotide group 18%; placebo group 20%).

Uhl W *et al.* (1999)<sup>4</sup> concluded in study of 302 patients from 32 hospitals, fulfilling the criteria for moderate to severe acute pancreatitis within 96 hours of the onset of symptoms, were randomly assigned to one of three treatment groups: group P (n=103) received placebo, while groups O1 (n=98) and O2 (n=101) received 100 and 200 µg of Octreotide, respectively, by subcutaneous injection three times daily for seven days. Analysis of all 302 patients revealed no

significant differences among treatment groups with respect to mortality, the rate of newly developed complications, the duration of pain, surgical interventions, or the length of the hospital stay.

### Conclusion

We concluded that history, clinical examination, radiological and blood investigations are helpful to come to a conclusive diagnosis and severity of acute pancreatitis and most of these cases can be managed conservatively and the use of Octreotide therapy helps in the favourable outcome.

### References

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