ABSTRACT

TITLE:

CLINICAL AND RADIOLOGICAL CORRELATION OF SEVERITY OF ACUTE PANCREATITIS

INVESTIGATOR:

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GUIDE:

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BACKGROUND:

Acute pancreatitis is a disease with wide clinical variation, which makes its diagnosis complex. Serum / urinary amylase measurement is a standard diagnostic method, although it was shown to be unable to recognize one fifth of AP patients. The severity of AP forms a continuum, and the average mortality rate approaches 2-10%. Most of the cases are mild and conservative treatment results in a rapid recovery in most of them. However, severe AP constitutes 15–20% of all

30-80% to 15-20%. CT scanning has increased the identification of pancreatitis. The care of a pancreatitis patient is demanding and requires dedication, diligence and efficiency.

In view of the hazardous nature of severe pancreatitis and its high mortality rate this dissertation is chosen to study the co relation of CT scoring and Clinical scoring of Pancreatitis so that CT scans can be used as a reliable marker of severe acute pancreatitis and diagnose it in the early stages and treated accordingly.

OBJECTIVES:

- 1. To analyse and compare the various clinical presentations of acute pancreatitis.
- 2. To correlate the severity of acute pancreatitis with regard to available biochemical parameters.
- 3. To assess the severity in relation to computerized tomography of abdomen.
- 4. To predict the outcome of acute pancreatitis with regard to CT abdomen.
- 5. To prognosticate the disease.
- 6. To decide the further management with CT abdomen and to decide when to intervene.

DURATION OF STUDY: 1 year (2017).

POPULATION TO BE STUDIED: Minimum of 50 cases.

STUDY GROUP: 15 TO 75 Yrs age group.

STUDY SETTING:

Department of General Surgery, Chengalpattu Medical College and Hospital, Chengalpattu.

DIAGNOSTIC CRITERIA FOR ACUTE PANCREATITIS:

Acute pancreatitis was diagnosed if there were findings consistent with acute pancreatitis and a raised serum amylase above the upper reference limit (URL). This diagnosis was further complemented with transabdominal USG and CE-CT. Exclusion of acute pancreatitis in patients with acute abdominal pain was based on clinical, radiographic, endoscopic and surgical findings.

SEVERITY ASSESSMENT OF ACUTE PANCREATITIS:

Assessment of severity based on clinical presentations. Assessment of severity was also based on CT abdomen. A correlation was obtained between clinical severity and that based on CT abdomen.

SCORING SYSTEMS:

1. CLINICAL SCORING:

In AP patients appropriate laboratory and physiological data were recorded on day 1 and 48 hours after admission to calculate the ranson criteria. MODS score provides a means to grade the intensity of dysfunction of six organ systems: the respiratory (spo2), renal (serum creatinine), hepatic (serum bilirubin), nervous system (GCS), cardiovascular (pulse rate) and the hematological system (platelet count).

CT SCORING(Balthazar):

GRADE APPEARANCE SCORE

Grade A Normal appearance 0

Grade B Focal or diffuse enlargement of pancreas. One Grade C Peripancreatic inflammation Two

Grade D Intra/ extrapancreatic fluid collection. Three

Grade E Two or more fluid collection or gas

in pancreas or retroperitoneum Four

CT SEVERITY INDEX:

Necrosis score based on CE-CT.

0% OF NECROSED PANCREAS 0

<33% OF NECROSED PANCREAS 2

33 – 50% OF NECROSED PANCREAS 4

>50% OF NECROSED PANCREAS 6

CT severity index = unenhanced CT score + necrosis score

>5 score indicates an 8 fold higher mortality.

CONCLUSION:

The above study gives a comprehensive and detailed analysis of the pattern of acute pancreatitis with emphasis on early recognition severe pancreatitis with CT Abdomen.