

Case Report

Diagnosis of epigastric pain: a case report

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ABSTRACT

Epigastric pain is the most significant symptom and a major clinical challenge in chronic pancreatitis. Pancreatic pain is characteristically described as a constant, severe, dull, epigastric pain that often radiates to the back and typically worsens after high-fat meals. However, many different pain patterns have been described, ranging from no pain to recurrent episodes of pain and pain free intervals, to constant pain with clusters of severe exacerbations. A 30-year old female inpatient with complaints of abdominal pain located on epigastric since 7 days ago. Patients also complain of nausea and vomiting, decreased appetite. The patient has a history of acute pancreatitis and was treated 6 months ago and is hyperthyroid. Physical examination within normal limits. On abdominal examination, there was tenderness in the epigastric part. Abdomen ultrasound examination revealed widening of the pancreatic duct. While hospitalized the patient was treated with meropenem 1 gram IV every 8 hours, pantoprazole 40 mg IV every 12 hours, ondansetron 8 mg IV every 12 hours, Kaltrofen supp if needed, Propranolol 5 mg PO every 12 hours and thyrozol 10 mg PO every 12 hours. Acute pancreatitis is an acute, non-bacterial inflammation of the pancreas organ. Radiographic examination must be done to establish diagnose beside anamnesis and laboratorium examination. To diagnose acute pancreatitis, at least 2 of 3 criteria must be met. Management of patients with acute pancreatitis includes non-operative and surgical. Antibiotics therapy in management of acute pancreatitis in the early stages is still controversial.

Keywords: Epigastric pain, Acute pancreatitis, Hypertiroid, Antibiotic therapy

INTRODUCTION

Acute pancreatitis is an acute, non-bacterial inflammation of the pancreas organ. Pancreatitis results from autodigestion of activated pancreatic enzymes. This results in the occurrence of edema, vascular damage, bleeding, and pancreatic organ necrosis. Overexpression of inflammatory cytokines such as interleukin (IL)-1, IL-6, IL-8, and tumor necrosis factor (TNF)- α can seriously impair the endothelial microcirculatory system and increase capillary permeability. Persistent inflammation can cause hypoxia and systemic inflammatory response syndrome (SIRS) which can increase mortality and lead to severe acute pancreatitis.^{1,2}

About 75-85% of the causes of acute pancreatitis can be identified. Obstruction of stones in the choleduct duct (38%) and alcohol (36%), as well as other causes.^{3,4} The

etiology of acute pancreatitis was due to biliary disease (43.8%) and alcohol addiction (26.5%). Acute pancreatitis due to alcohol is four times more common in men (39.1%) than women (10.6%). Hyperlipidemia can also be a cause of acute pancreatitis, especially in moderate and severe degrees. Idiopathic acute pancreatitis in men reaches 16.1% while in women it reaches 16.6%. Acute pancreatitis can also occur after performing endoscopic retrograde cholangiopancreatography (ERCP) which is more common in women (6%) than men (1.8%).²

Currently the incidence of acute pancreatitis is increasing worldwide. The incidence of acute pancreatitis varies from country to country, around 10-100/100,000 people. The incidence of acute pancreatitis in men increases at the age of 33-38 years and is still high at the age of 68 years. Whereas in women the incidence increases at the age of 53-78 years.¹ Acute pancreatitis can lead to sudden

hospital admission for gastrointestinal disturbances. For mild degrees, the length of stay in the hospital reached 8.3 ± 0.2 days, while moderate degrees lasted 14.6 ± 0.5 days, and severe degrees reached 26.2 ± 3.1 days.⁵

Here we presented a case report of a 30-years old woman who was diagnosed with acute pancreatitis.

CASE REPORT

A 30-year-old woman was hospitalized with complaints of abdominal pain in the epigastrium for 7 days, intermittent. The patient also complains of nausea and vomiting every meal, decreased appetite. The patient has a history of acute pancreatitis and was treated 6 months ago and is hyperthyroid. The patient took regular medication propranolol 2×5 mg and thyrozol 2×10 mg. History of drug allergy was denied.

Physical examination found blood pressure 98/57 mmHg, pulse 90 beats per minute, breathing with a respiratory rate of 20 times per minute, 98% oxygen saturation on room air, body temperature 37°C . Pupillary examination remains normal, isochor, positive light reflex on both sides. Examination of pulmo and cor within normal limits. Abdominal examination revealed tenderness in the epigastrium. On examination of the extremities within normal limits.

Routine complete blood count showed normal results (WBC $8.18 \times 10^3/\text{ul}$ (neutrophils 80.1%, Lymphocytes 12.9%, monocytes 6.3%), hemoglobin 12.3 g/dl, HCT 37.9%, platelets $297 \times 10^3/\text{ul}$). Examination of pancreatic enzymes showed normal results of amylase 78.1 and lipase 15.7. Examination of the lipid profile found HDL 38, LDL 65, total cholesterol 124, triglycerides 134 and uric acid 5.3. On ultrasound examination of the abdomen, widening of the pancreatic duct was found.



Figure 1: Ultrasound of the abdomen showed widening of the pancreatic duct.

During hospitalization, the patient was treated with meropenem 1 gram IV every 8 hours, pantoprazole 40 mg IV every 12 hours, ondansetron 8 mg IV every 12 hours, Kaltrofen supp if needed, propranolol 5 mg PO every 12 hours and thyrozol 10 mg PO every 12 hours. The patient was discharged from our hospital after 8 days of hospitalization.

DISCUSSION

The diagnosis of acute pancreatitis in this patient was made clinically including anamnesis, the patient complained of typical pain in the upper right area, complaints accompanied by nausea and vomiting, also pain especially when the patient was in a lying position and getting better in a sitting position.

The diagnosis of acute pancreatitis can be obtained from the history, physical examination, and support. According to the American college of gastroenterology to diagnose acute pancreatitis, 2 of 3 criteria must be met, such as consistent abdominal pain, a 3-fold increase in serum amylase and/or lipase and abnormalities found on radiological examination.³ In this patient, through history and physical examination, complaints and signs suggestive of acute pancreatitis were found. Investigations carried out in the form of laboratory tests and pancreatic enzymes were within normal limits. Abdomen ultrasound examination revealed dilated pancreatic duct.

The patient was treated with meropenem 1 gram IV every 8 hours, pantoprazole 40 mg IV every 12 hours, ondansetron 8 mg IV every 12 hours, kaltrofen supp if needed, propranolol 5 mg PO every 12 hours and thyrozol 10 mg PO every 12 hours. The patient was given a carbapanem class of antibiotics. The role of antibiotics in the management of acute pancreatitis in the early stages is still controversial. Although some studies show that there is a reduction in mortality with the use of antibiotics.⁵

According to Gang et al within 10 years of treatment 47 out of 80 patients were successfully treated with antibiotics for pancreatic necrosis infection. Mortality with the use of antibiotics is only 23% when compared to the surgical method, which reaches 54%.⁶ Antibiotics that can be used are carbapanem, quinolones, metronidazole and high-dose cephalosporins.³ Aggressive intravenous hydration as early as possible, pain control, and bowel rest is one of the non-surgical managements.^{6,7}

CONCLUSION

We present a case report of a patient with acute pancreatitis. Acute pancreatitis is an acute, non-bacterial inflammation of the pancreas organ. Pancreatitis results from autodigestion of activated pancreatic enzymes. Radiographic examination must be done to establish diagnose beside anamnesis and laboratorium examination. To diagnose acute pancreatitis, 2 of 3 criteria must be met, such as consistent abdominal pain, a 3-fold increase in

serum amylase and/or lipase and abnormalities found on radiological examination. Management of patients with acute pancreatitis includes non-operative and surgical. Antibiotics therapy in management of acute pancreatitis in the early stages is still controversial. It is important to provide supportive therapy and evaluate response to therapy and avoid complications.

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REFERENCES

1. Badiu P, Rusu OC, Grigorean VT, Neagu SI, Strugaru CR. Mortality prognostic factors in acute pancreatitis. J Med Life. 2016;9(4):413-8.
2. Sporek M, Dumnicka P, Bladzinzka AG, Ceranovitz P. Angiopoietin-2 is an Early Indicator of Acute Pancreatic- Renal Syndrome in Patients with Acute Pancreatitis. Mediators Inflamm. 2016;1:1-7.
3. Cahyono, Suharjo B. Tata Laksana Terkini Pankreatitis Akut. Medicinus. 2014;27(2):44-50.
4. Greenberg J, Hsu J, Bawazeer M, Marshall J, Friedrich JO. Clinical practice guidelines: management of acute pancreatitis. J Can Chir. 2014;59(2):128-40.
5. Nurman A. Pankreatitis akut. In: Sudoyo AW, Setiyohadi B, Alwi I, Simadibrata M, Setiati S (ed). Buku Ajar Ilmu Penyakit Dalam: Gastroenterologi Hepatobilier. Pusat penerbitan IPD FK-UI. 2006;486-91.
6. Ken Fukuda, James., Franzon, Orli., Ferri, thiago A. Prognosis of Acute Pancreatitis by PANC 3 score. ABCD Ar Bras Cir Dig. 2013;26(2):133-5.
7. Tenner S, Bailie J, DeWitt J, Vege SS. American College of Gastroenterology Guideline: Management of Acute Pancreatitis. AMJ Gastroenterol. 2013;10:1-16.

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