

CASE REPORT

ACUTE PANCREATITIS WITH NORMAL SERUM LIPASE- A CASE REPORT

N.S. Neki¹, Deepali Kaushal², Aarti Vaid³, Amandeep Singh Dhanju⁴

¹Professor, ²Post graduate student, Department of Medicine, Government Medical College and Guru Nanak Dev Hospital, Amritsar-143001, India.

ABSTRACT:

Acute pancreatitis is a medical emergency with increased morbidity and mortality. Typical features include epigastric pain, raised pancreatic enzymes and characteristic radiographic findings. We report a case of non-alcoholic 30 year male patient who presented with epigastric discomfort, fever and swollen pancreas but with normal serum lipase level. He was satisfactorily managed with conservative treatment.

Key Words: Acute pancreatitis; Serum lipase.

Corresponding Author: Dr. N.S. Neki, Professor, Department of Medicine, Government Medical College and Guru Nanak Dev Hospital, Amritsar-143001, India

This article may be cited as: Neki NS, Kaushal D, Vaid A, Dhanju AS. Acute pancreatitis with normal serum lipase - A case report. J Adv Med Dent Scie Res 2016;4(6):71-72.

Access this article online	
Quick Response Code 	Website: www.jamdsr.com
	DOI: 10.21276/jamdsr.2016.4.6.16

INTRODUCTION

Acute pancreatitis is a medical emergency with varied clinical manifestations. It is caused by various conditions like alcohol intake, gallstones, hypertriglyceridemia, hypercalcemia, drugs, endoscopic retrograde cholangio-pancreatography and trauma. However 20% cases are idiopathic in nature.¹ To confirm the diagnosis of acute pancreatitis, two out of 3 following criteria are must a) typical abdominal pain, b) elevated serum lipase and or amylase levels more than 3 times of the upper limit of normal, c) Computed tomography (CT) of abdomen showing typical findings.² Acute pancreatitis has a mortality of about 47%.³

CASE REPORT

A 30 year old male non alcoholic and teetotaler presented with fever, epigastric pain and vomiting since 10 days. Fever was 102°F, intermittent. On abdominal examination, there was tenderness in the epigastrium and ill defined epigastric mass which did not move with respiration. Ultrasonography of abdomen revealed slight swelling of pancreas (Head 3.2 cm, body 2.6 cm and tail 2.7cm), hypoechoic distended gall bladder with biliary sludge and minimal ascites. CT abdomen showed that there was evidence of swelling and edema of pancreas with peri-pancreatic collection with mild ascites. Laboratory investigations included Hemoglobin 12.5 g/dl, Total leucocyte count 12300/mm³, Differential leucocyte count neutrophils 76%, lymphocytes 24%, renal and hepatic profile normal, ESR 24 mm at the end

of one hour, serum amylase 75 U/L (Normal upto 95), serum lipase 185 U/L (N 23-300), urinary amylase 270 IU/L (N <360), C reactive protein 18mg/dl (N <6), Serum alkaline phosphatase 328 U/L (N 50-136), Serum cholesterol 115 mg/dl (N <130), S.triglycerides 75 mg/dl (N <150), HDL 23 mg/dl (N>40), LDL 110 mg/dl (N <130).

He was put on intravenous ceftriaxone for 2 weeks along with I/V fluids, nothing orally and Ryle's tube aspiration. Fever and abdominal pain subsided after 5 days. He was discharged after 2 weeks with normal radiological findings.

DISCUSSION

Acute pancreatitis is one of the most common causes for hospitalisation.⁴ Diagnosis is made on clinical examination, biochemical investigations and radiological studies, Elevated serum lipase levels with normal amylase in acute pancreatitis have been reported by few workers⁵. However normal serum lipase levels in acute pancreatitis have been rarely reported.^{6,7,8} Our patient had typical clinical and radiological features of acute pancreatitis but with normal serum lipase, amylase and urinary amylase levels. The normal enzyme levels may be due to late presentation of the patient with or without pancreatic necrosis. At the start of acute pancreatitis, levels of serum amylase increase rapidly over 3-6 hours and remain elevated for 3-5 days and are excreted by the kidneys⁵. Serum lipase levels start increasing in 3-6 hours and remain elevated for 1-2 weeks.⁶ Unlike serum

amylase, serum lipase is reabsorbed by renal tubule and thus remains elevated for prolonged period which may be helpful in late presenting patients.⁹ The treatment of patient is conservative

CONCLUSION

Diagnosis of acute pancreatitis should be suspected even with normal lipase and amylase levels in the appropriate clinical settings and imaging modalities are helpful in the confirmation of diagnosis.

REFERENCES

1. Whitcomb DC. Value of genetic testing in the management of pancreatitis. *Gut*. 2004; 53: 1710-17.
2. Banks PA, Freeman ML. Practice Parameters Committee of the American College of Gastroenterology. Practice guidelines in acute pancreatitis. *Am J Gastroenterol*. 2006; 101: 2379-400
3. Talukdar R, Vege SS. Recent developments in acute pancreatitis. *Clin Gastroenterol Hepatol*. 2009; 7 (11 Suppl) : 53-9.
4. De Frances CJ, Hall MJ, Podgornik MN. Advance Date From Vital and Health Statistics. No. 359.2003 National Hospital Discharge Survey. Centers for Disease Control and Prevention. Atlanta, GA 30333, USA. National Center for Health Statistics, 2005.
5. Clavien PA, Robert J, Meyer P, Borst F, Hauser H, Herrmann F, et al. Acute pancreatitis and normoamylasemia. Not an uncommon combination. *Ann Surg*. 1989; 210: 614-20.
6. Cartier T, Sogni P, Perruche F, Meyniard O, Claessens YE, Dhainaut JF, Der Sahakian G. Normal serum lipase level in acute pancreatitis – a case report – *Emerg Med J*. 2006; 23: 701-2.
7. Khan FY, Matar I, Sternby B, O'Brien JF. Chylous ascites secondary to hyperlipidemic pancreatitis with normal serum amylase and lipase. *World J Gastroenterol*. 2007; 13(3): 480-82.
8. Shah AM, Rodney E, Kothari ST, Maksoud C, Di Giacomo WS, Baddoura W. Acute pancreatitis with normal serum lipase: A case series. *J. Pancreas (Online)* . 2010; 11(4) : 369-72
9. Zinsmeister AR, Di Magno EP. What is the best biochemical test to diagnose acute pancreatitis? A prospective clinical study. *Mayo Clin Proc* 1996; 71: 1138-44.



Source of support: Nil

Conflict of interest: None declared

This work is licensed under CC BY: *Creative Commons Attribution 3.0 License*.