



An Unusual Hyperamylasemia

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Case Blog

A 79 years old man was admitted to the Emergency Department (ED) for acute abdominal pain, mainly located in the epigastrium and irradiated to the hips and back. Pain started after a large meal and it was associated to nausea and vomiting. He had history of arterial hypertension, obesity and cholelithiasis. Exams revealed increase of C-reactive protein (CPR), mild Neutrophila Leucocytosis and moderate hyperamylasemia. Abdomen ultrasound was difficult due to gut air interference and abundant adipose tissue. Cardiac and the remaining objective physical examination were within normal limits. Acute biliary pancreatitis was hypothesized, so patient was submitted to fasting and intravenous hydro saline solutions.

After few days, clinical conditions worsened with increase of abdominal pain and stupor of new onset. Blood gas analysis revealed metabolic acidosis with elevation in glycemic levels. Hyperglycemia, glycosuria and metabolic acidosis with elevation of ketones in urine led to diagnosis of diabetic ketoacidosis.

Conclusion

Diabetic ketoacidosis represents an insidious disease and sometimes may be a fatal complication of uncontrolled diabetes mellitus. A specific elevation of amylase and lipase may occur in 16% to 25% of DKA cases. Causes of this association are still unclear and under debate [1,2]. Hyperamylasemia, however, can be correlated with pH and serum osmolality, but lipase elevation relates only with serum osmolality [3].

Amylase elevation may be a confounding element, especially in presence of abdominal pain and every effort are needed to exclude other causes of abdominal pain, such as acute pancreatitis; physicians must be always aware of these two conditions, especially in high risk patients such as obese and dyslipidemic subjects.

However these two diseases may overlap and leading increased diagnostic difficulties [4].

Early diagnosis and management of this clinical condition are mandatory; treatment consists in aggressive rehydration and electrolyte replacement, insulin therapy, management of underlying precipitating events.

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