Internet Journal of Medical Update

Journal home page: http://www.akspublication.com/ijmu

Case Report

Right flank pain as the only symptom for acute pancreatitis in a patient on treatment for HIV infection

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(Received 15 January 2015 and accepted 21 April 2015)

ABSTRACT: Acute pancreatitis often presents with severe epigastric pain and referred pain to the back. In practice, epigastric pain of pancreatitis may also occasionally present with associated left sided flank pain. Here, we present a case of a 38 year old man on antiretroviral therapy for HIV infection, who came with severe right sided lumbar pain to the emergency department. The initial abdominal ultrasonogram was normal and the patient was misdiagnosed as possible renal associated pain. The CECT scan done the following day showed acute pancreatitis with peripancreatic fat stranding, fluid upto the right perinephric space and thickening of pararenal fascia. Urinalysis and renal function tests were within normal limits. On literature search, we could not find any reported cases of acute pancreatitis with right lumbar pain as the only presenting symptom. Patients taking anti-retroviral therapy develop pancreatitis most commonly due to hypertriglyceridemia. However, this patient had a normal lipid profile. On ruling out other causes, we conclude that his pancreatitis was caused by Azatanavir, which has only post marketing reports of pancreatitis and we could find no specific study linking the drug to the disease.

KEY WORDS: ***Pancreatitis; HIV infection; ART; Azatanavir***

INTRODUCTION

Pancreatitis is usually seen as an excruciating epigastric pain with referred pain to the back. In practice, epigastric pain of pancreatitis may also occasionally present with associated left sided flank pain. Here, we present a case of a 38 year old man on antiretroviral therapy for HIV infection, who came to the emergency department with severe right sided lumbar pain. The initial abdominal ultrasonogram was normal. CECT scan done the following day showed acute pancreatitis. Urine analysis and renal function tests were within normal limits. The patient improved on medical line of management and was discharged after six days.

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CASE DETAILS

A 38 year old man presented to the emergency room with right lumbar pain of six hours duration. The pain was severe and constant in nature. The patient also complained of two episodes of vomiting, containing clear fluid. He had no history of fever or trauma, and had regular bowel and bladder habits.

The patient had been diagnosed with HIV infection four years back. He was taking Tenofovir 300 mg with Emtricitabine 200 mg and Atazanavir 300 mg with Ritonavir 100 mg since then under the care of a private practitioner not associated with our institution. The patient also had history of jaundice, possibly viral hepatitis, six years back for which no treatment details were available. He gave a history of allergy to NSAIDS and denied history of any addictions.

On examination, his pulse was 88 beats per minute and blood pressure was 130/80 mm of mercury. Per

abdominal examination revealed severe tenderness in the right lumbar region. In other general and systemic examinations, no abnormality was found.

The initial diagnosis based on clinical examination pointed towards a renal pathology. Ultrasonography was done in the emergency room and was found to be normal. The patient was admitted and started on medical therapy which consisted of broad spectrum antibiotics and analgesics.

On admission the total leucocyte count was 12.3 x 10^3/l with neutrophils 92.9%. S. creatinine was 1.5 mg/dl with s. amylase 126.1IU/L and s. lipase 125 IU/L. The liver function tests were mildly deranged with total bilirubin of 3.8 mg/dl (direct: 1.8) AST 110 IU/ml, ALT 90.8 IU/ml and alkaline phosphatase 169 IU/ml. RBS was 152.6 mg/dl. Routine examination of urine and fasting lipid profile were found to be within normal limits. The patient had a raised CRP of 27.8 mg/L. S. calcium was 8.5 mg/dl.

On day 2 of admission patient still had significant pain and a CECT was advised. The report was suggestive of bulky head of pancreas and mild peripancreatic fat stranding. Moreover, it showed moderate perinephric fat stranding with perinephric fluid on the right side and thickening of anterior and posterior right pararenal fasciae. The kidneys, ureters and bladder were normal. (**Figure 1**)

A decision was made to continue medical line of management and Injection Ulinastatin (1 million units IV 8 hourly) was added. The dosage of Tenofivir and Emtricitabine was reduced to half according to the advice of the treating physician.

The patient's serum creatinine showed a mild rise to 2.2 mg/dl on the third day and was conservatively managed with adequate hydration, input-output monitoring and diuretics.

On day 5, the patient had moderate relief from pain and the creatinine came down to 1.0.

The patient improved and was discharged on day 6. Before discharge, reports showed a drop in TLC (6,900), neutrophils (44.7%) and s. lipase (81.5). He was advised follow-up with his general physician in view of ART-related side effects including hyperbilirubinemia.

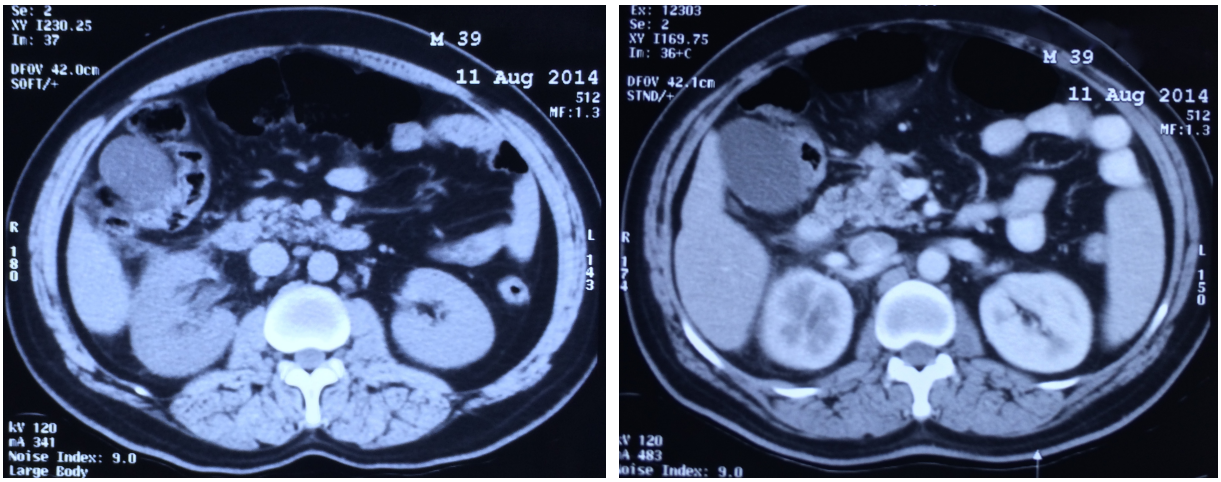

Figure 1: CECT showed bulky head of pancreas and mild peripancreatic and perinephric fat stranding with right perinephric fluid and thickening of pararenal fascia.

DISCUSSION AND CONCLUSION

Pancreatitis is not an uncommon cause of acute abdomen and is seen often in the emergency department typically as stabbing epigastric pain radiating to the back and associated with nausea and vomiting. There are a few times when a clinician may also see associated flank pain, but pancreatitis with the sole presentation of right lumbar region pain and tenderness is rare. We were unable to find another case in the literature with such a confounding manifestation, although Chen *et al*[1] reported a case of left flank pain as the sole manifestation of acute pancreatitis.

There are many known causes of pancreatitis, which include gallstones, alcohol, endoscopic retrograde cholangiopancreaticography (ERCP), certain medications, hypertriglyceridemia and hypercalcemia[2]. Our patient had no gallstones, no history of alcohol abuse, was not a post ERCP or a trauma patient, had a normal lipid profile and serum calcium level and the only medication he was on was the four antiretrovirals.

The introduction of highly active antiretroviral therapy (HAART) has significantly reduced the mortality and morbidity associated with HIV infection[3]. However, each antiretroviral is associated with its own set of adverse effects[4]. A few antiretroviral drugs are implicated in the development of pancreatitis. Tenofovir and Emtricitabine are not clinically reported to cause pancreatitis unless taken in combination with other ART drugs[5]. The drug Ritonavir is known to cause hypertriglyceridemia related pancreatitis[6].

 | DOI: http://dx.doi.org/10.4314/ijmu.v11i1.4

However, our patient had a normal lipid profile on investigation. The only other drug that the patient was taking was Atazanavir: it has only post-marketing reports of pancreatitis.

On ruling out other causes we feel that the most likely aetiology for this patient's disease was the daily ingestion of Azatanavir.

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