Tropical calcific pancreatitis in HIV patient

Sir,

A 36-year-old female from rural central Maharashtra with known case of human immunodeficiency virus infection (CD4 cell count, 249 per cubic millimeter) for six months on regular anti-retroviral drugs presented with epigastric pain, nausea, and few episodes of vomiting for 3 days. She was taking a combination of lamivudine and zidovudine (from local civil hospital where anti-retroviral drugs are provided free of cost). There were similar episodes of such type of abdominal pain. Abdominal pain was mid epigastric, dull aching in nature, increased after taking meal and some times radiating to back. She was also diagnosed recently as insulin diabetes mellitus and taking regular insulin. She was a nonsmoker and nonalcoholic. We had no reports regarding investigations performed during previous episodes and had not identified other causes of pancreatitis. On examination, vitals were stable and tenderness was present in the epigastric region. There was no palpable abdominal mass or other specific findings noted on physical appearance. At the time of admission, hemoglobin was 7.9 g/dl, total leukocyte count was 4800 and platelet count was 431,000. Her fasting and post meal blood sugar were 180 and 220 mg per dl on regular insulin. Her serum lipase was 193 U per liter (normal range up to 180 U/litre). Serum amylase and lipase levels are widely used as screening tests for acute pancreatitis in patients with acute abdominal pain or back pain. Values greater than three times the upper limit of normal virtually clinch the diagnosis if gut perforation or infarction is excluded.[1] In this case, value of serum lipase was marginally raised which may suggest pancreatitis. Her serum triglyceride, amylase and calcium levels were within normal limits. Liver function tests were within normal range. Ultrasonography of the upper abdomen [Figure 1] and computed tomographic images of the abdomen [Figure 2] revealed coarse, well-defined, and dense calcifications within the body of the pancreas (arrows). The pattern is typical of the large intraductal calculi of tropical calcific pancreatitis, which has been increasingly recognized as a cause of nonalcoholic, chronic pancreatic disease in tropical developing nations. Tropical pancreatitis is chronic calcific, non-alcoholic pancreatitis, prevalent in developing countries like India which is seen in malnourished patients and in diets rich in tapioca (cassava, Manihot esculenta), a staple diet of poor people in Kerala.[2]

Hypertriglyceridemia, hypercalcemia, obstruction of the main pancreatic duct by stenosis, stones, cancer, genetic mutations are some of the less common causes.[3,4] The cause of this condition remains unknown, although a study from Bangladesh showed association between the serine protease inhibitor Kazal type 1 (SPINK1 N34S) mutation and increased risk of several forms of pancreatic disease, including fibrocalculous pancreatic diabetes, tropical calcific pancreatitis, and non-insulin-dependent diabetes mellitus.[5] No reports are available regarding tropical calcific pancreatitis caused by HIV infection or due to antiretroviral therapy. However, further studies are required to prove this hypothesis and come to any conclusion.

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REFERENCES

1. Greenberger NJ, Conwell DL, Banks PA. Approach to the patient with pancreatic disease. In: Longo DL, Fauci AS, Kasper DL, Hauser SL, Jameson JL ed. Harrison's principles of internal medicine, 18th edn. New York: McGraw-Hill Inc, 2012;2631.

2. Mahurkar S, Reddy DN, Rao GV, Chandak GR. Genetic mechanisms underlying the pathogenesis of tropical calcific pancreatitis. World J Gastroenterol 2009;15:264-9.

3. Kakaraparthi S, Prabhu R. Chronic Calcific Pancreatitis with Concurrent Autoimmune Hemolytic Anemia: A Case Report. Webmed Central Pancreas 2011;2:WMC001905.

4. Banks PA. Epidemiology, natural history, and predictors of disease outcome in acute and chronic pancreatitis. Gastrointest Endosc 2002;56:S226-30.

5. Schneider A, Suman A, Rossi L, Barmada MM, Beglinger C, Parvin S, et al. SPINK1/PSTI mutations are associated with tropical pancreatitis and type II diabetes mellitus in Bangladesh. Gastroenterology 2002;123:1026-30.

Sir,

Once a relatively common disorder, cardiovascular syphilis is now a rare entity. Despite effective antibiotic therapy and public health measures, cases of cardiovascular syphilis still occur. Aneurysm is the most common form of presentation in these cases.

We describe a case of cardiovascular syphilis with aneurysm of aorta.

A 50-years-old man with a history of cough, change of voice, breathlessness, and fever since 15 days was admitted to our hospital. Patient had pallor, prominent neck pulsations, right-side tracheal deviation, fullness in left parasternal region, and left vocal cord paralysis. Chest X-ray showed consolidation in left upper lobe. Ultrasonography (USG) of thorax showed cystic lesion with vascularity in left upper chest suggestive of aneurysm. Computed tomography (CT) thorax showed aneurysmal dilatation of descending arch of aorta [Figure 1].

Hemogram revealed total White Blood Cells (WBC) count of 6800 cells /cmm with Erythrocyte sedimentation rate (ESR) 140 mm/at 1 h. Induced sputum smear examination for acid fast bacilli (AFB) was negative and he was HIV seronegative.

With the clinical evidence of aneurysm and investigations, we tried to search the cause for the same. After ruling out atherosclerosis and tuberculosis, rapid plasma reagin test (RPR, Span diagnostics, Surat, India) was performed with serum sample and found to be reactive with a titre of 1:32. Further it was confirmed at National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore, India, using Treponema pallidum particle agglutination (TP-PA) test (SERODIA-TP-PA Fujirebio Inc., Tokyo Japan, Fujirebio Europe, B.V., Netherlands) with the test being positive with a titre of 1:2560.

Thus patient was diagnosed as a case of syphilitic aneurysm and advised benzathine penicillin, 2.4 million units per week for 3 weeks and referred to cardiovascular surgeon for surgical repair. Patient succumbed to the illness before the surgery. Postmortem was not done as family did not inform the death to the hospital.

Cardiovascular syphilis is a late manifestation of the disease usually occurring after 10–30 years of initial infection. [3] In our case after ruling out all the possibilities, cardiovascular syphilis was thought of. Screening with RPR along with TP-PA test ruled out false-positive result.

Antibiotic therapy, in the form of penicillin, should be administered, although surgery is a definitive therapy. The prognosis for patients with syphilitic aneurysms is extremely poor. Rupture into various structures and obstructive pneumonia...