Pott's Spine With Bilateral Psoas Abscess In A Hiv Positive Patient

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Citation

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Abstract

We describe a case of psoas abscess

CASE

A 42 year old man was admitted to this hospital with history of intermittent fever with evening rise since 4 months. Lower abdominal discomfort since 3 months. History of anorexia and weight loss of approximately 4 kgs was present since 3 months. On examination, his vital signs were preserved. Mild fever (100 °F) was recorded. Pallor was present. Abdominal examination revealed mild tenderness in the right iliac fossa, hypogastrium and left iliac fossa. There were no garding, rigidity or rebound tenderness. Motility of the hip joint was normal without pain. Spinal tenderness was present over the L3,L4 spinous processes. Neurological examination was normal.

On investigations, Hb was 9.8 gm%, TLC was $5,500 \text{/mm}^3$, DLC had 48% polymorphs, 46% lymphocytes, 2% eosinophils, 4% monocytes. ESR was 122 mm in first hour. ELISA for HIV 1 was positive. CD4 T cell count was 276/mm^3 .

USG of abdomen revealed bilateral psoas abscesses. MRI scan revealed destruction of L3 vertebrae (Fig-1) with bilateral psoas abscesses. (Fig-2) Guided aspiration of approximately 250cc pus was done from both the abscesses. Cytological and bacteriological tests suggested tuberculosis. Anti tubercular treatment was started. Fever responded within 12 days and the patient was discharged. He is called for followup after 1 month.

Figure 1

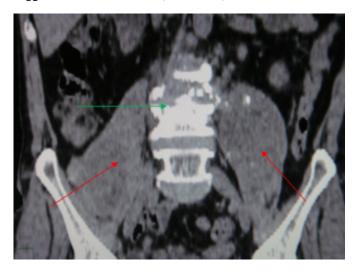
Fig 1: C.T. showing: Axial view of abdomen at level of L3 vertebrae.



Both psoas muscles appear bulky. Left psoas muscle is much bulkier than right and shows a hypodense lesion which have well defined outer margins (red arrow). Few nodular hyperdense areas representing small bony chips are also noted within the substance of the muscle. Destruction of whole of lower end plate of L3 noted (green arrow).

Figure 2

Fig 2: C.T. showing: Coronal view of abdomen at level of L3 and L4 vertebrae. The intervertebral disc space between L3-4 vertebral body is lost along with destruction and collapse of L3 vertebra(green arrow). Both psoas muscles are bulky and shows well defined hypodense areas suggestive of B/L abscess. (red arrows).



DISCUSSION

This case demonstrates an unusual reason of lower abdominal pain, psoas abscess. Well known presenting symptoms of psoas abscess are pain, limp, fever and psoas spasm. (1,2,3). Chills and palpable mass may also accompany these symptoms. Pain is generally localized to ipsilateral hip, but occasionally radiates to the abdominal wall, back, thigh, inguinal area, flank, knee and calf. (4) Most common physical finding is pain felt during flexion and external rotation of the affected hip. (1,4) Which was interestingly absent in our case. In general, psoas abscess develops in a very short time, but our patient had been complaining about vague lower abdominal pain for four months. Our's was a case of secondary psoas abscess because of tubercular involvement of spine which is extremely rare.

The most commonly associated disorder with secondary psoas abscess is Crohn's disease ^(5,6); others include appendicitis, inflammation or neoplasms of bowel, colon diverticulitis, discitis and a variety of intraabdominal or retroperitoneal infections. ^(7,8) For early diagnosis and prompt onset of therapy, spine should always be included in

differential diagnosis as source of infection in secondary psoas abscess. Tubercular involvement of the spine results in abscess formation and collapse of the vertebral bodies. The pus tracks down along the tissue planes to present superficially in places often distant from the involved vertebrae. Classical example is psoas abscess. Psoas abscess is an uncommon disease with varied etiology. Recently, drug abuse and HIV infection have become important risk factors in identification of a patient with psoas abscess. Mycobacterium tuberculosis is considered an extremely rare cause of psoas abscess, but it is reported in HIV patients. Preferred treatment is percutaneous drainage guided by CT. ⁽⁹⁾Because of an high incidence of increase in HIV infection, extrapulmonary tuberculosis should be included in the differential diagnosis, such as in this case of a psoas muscle abscess. There exists another widely accepted school of thought that despite the size of the abscess surgical intervention is not mandatory because it will heal under appropriate antituberculosis treatment. (10)

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