Tuberculous Psoas Abscess Presenting as Perianal Abscess


Abstract
Psoas abscess is a rare disorder that is often difficult to identify. The abscess may present as back pain, pyrexia of unknown origin, groin pain that mimics a septic hip, increased frequency of micturition, or abdominal pain. We present a case of tuberculous psoas abscess which presented as perianal abscess besides causing a groin swelling. This presentation posed both a diagnostic dilemma as well as management challenge. A brief review of clinical features, diagnosis, treatment and outcome of patients with psoas abscess is presented.

Introduction
The psoas muscle attaches the lower portion of the spine to the femur. It helps with flexion of the hip and flexion of the lumbar spine. The muscle attaches along the side of the spine, to the vertebral bodies and the transverse processes. Infections that occur in the spine, either in the disc spaces or the vertebral bodies, often may spread into the adjacent vertebral bodies. Pus may track along the psoas muscle. Abdominal infections may spread to the psoas muscle. Pus may spread along the psoas muscle to the groin. Majority of psoas abscesses are attributed to spine lesions, the commonest being tuberculous infection of thoracolumbar vertebra. However, it has been seen that in many cases there may be no lesion in spine but there is a primary psoas abscess with normal surrounding bones and organs. Our case highlights this fact and compels us to think about some other pathogenesis of psoas abscess besides spine or intestines or renal infections. We present a case of 52 years old male who presented as perianal abscess with groin swelling. Investigations confirmed these manifestations to be due to tuberculous psoas abscess.

Case Report
We present a case of a 52 years old male who presented with painless lump in the left groin and perianal swelling with on and off loose motions since 2 months. He gave history of occasional fever and backache, which used to subside after taking medication from local doctor. He had pulmonary kochs 17 years back for which had taken complete treatment for 9 months. Presently, he was treated by a local doctor who had aspirated pus from perianal swelling followed by a course of antibiotics; however there was continuous discharge from the aspiration site as well as loose motions even after one month of treatment. His clinical examination revealed a soft cystic swelling in the left inguinal region which was fluctuant and a discharging perianal abscess at 3 O’clock position (Fig. 1). Pressure on the inguinal swelling used to increase the discharge from perianal site. His per-rectal examination revealed bogginess. His spine was unremarkable with normal hip movements. His haematological profile showed leucocytosis of 13,000/cumm with ESR of 80 mm at the end of first hour. His X-ray lumbosacral spine was unremarkable. Ultrasonography (USG) revealed a retroperitoneal collection in communication with groin and perianal collection with internal echoes. Computed Tomography (CT) scan confirmed a Left psoas abscess (Fig.2) which was tracking down into

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the left inguinal region and descending down in the perianal region measuring 16 cm X 11 cm X 6 cm (Fig. 3). His Montoux test was positive and serology for tuberculosis was positive. Patient was started on 4 drug anti kochs treatment (AKT) viz; isoniazid, rifampicin, pyrazinamide and ethambutol. As pus was thick and loculated, open surgical drainage was done through lumbar, inguinal and perianal incisions. Lumbar and inguinal incisions were closed primarily after keeping a drain whereas perianal incision was allowed to heal by secondary intention. Post-operative recovery was uneventful. Patient was shifted to two drugs AKT (isoniazid and rifampicin) for nine months after three months of 4 drugs AKT making it 12 months of AKT. Follow up of one year has shown him to be disease and symptom free.

**Discussion**

A psoas abscess is a rare condition that can be extremely difficult to diagnose.\(^1\) This frequently leads to a delay in making the diagnosis and a consequently prolonged hospital stay and an increased morbidity rate.\(^2\) The typical triad of fever, flank pain, and limitation of hip movement is present only in 30% of cases.\(^1\) Other symptoms include malaise, anorexia, lower back pain, a palpable mass, or pyrexia of unknown origin.\(^3\)

Psoas abscesses can be classified into primary or secondary depending on the underlying cause. A primary psoas abscess has no obvious focus of infection being most prevalent in young patients and more common than secondary abscesses. Psoas abscess can occur secondary to Crohn’s disease, diverticulitis, colorectal cancer or ruptured abscess of the kidney or pancreas. However, tuberculosis of the dorsolumbar spine is the commonest cause of psoas abscess. Osteomyelitis of the spine can produce a paraspinous abscess that involves the psoas muscle. However, in our case there was no involvement of either spine or surrounding organs making it a primary psoas abscess.
Onset is usually subacute, and symptoms are generally present for a few weeks. Patients usually present with flexion of the hip and lumbar lordosis. Distal extension of a psoas abscess may present as a mass in the inguinal region. Proximity to the hip capsule can precipitate symptoms that mimic a septic hip. The iliopsoas bursa that separates the tendon from hip joint communicates with the capsule of the hip in 15% of the population allowing infection to spread to the hip. In our case patient presented with groin swelling and perianal swelling with loose motions due to collection in the perirectal area which was represented by bogginess on per rectal examination.

As in most clinical scenarios, diagnosis is aided by appropriate radiological investigations. CT scanning has proved superior to ultrasonic scanning and is considered the radiological investigation of choice. In our case CT scan as well as serology helped us to confirm the diagnosis.

Treatment of psoas abscess involves the use of appropriate antibiotics as well as drainage of the abscess. Drainage may be percutaneous or surgical. CT-guided drainage has been proven to be both effective and minimally invasive in dealing with this condition, and has been advocated as the method of choice. Surgery is only indicated when percutaneous drainage fails, or when the abscess is multi-locular. In our case the collection was thick and multilocular, hence open surgical drainage was done. This case highlights that tuberculous psoas abscess may present as perianal abscess without any involvement of spine or hip and this should be taken into consideration while treating patients with perianal abscesses.

References