

BIZZARE CASE OF BILATERAL PSOAS ABSCESS

General Surgery

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ABSTRACT

Psoas abscess (PA) is an uncommon infection that can manifest as pus in the ilio-psoas muscle compartment. Mynter et al originally described this phenomenon in 1881. The psoas muscle originates from the lateral side of the 12th thoracic and all lumbar vertebrae. It extends distally over the brim of the pelvis and integrates with the iliacus muscle. It goes beneath the inguinal ligament and inserts on the lesser trochanter of the femur. The psoas muscle is linked to several key structures, the renal pelvis and ureter are located anterior to the muscle. The terminal ileum and appendix cross to the right, whereas the jejunum and sigmoid colon cross to the left. However, the spine is the most nearly similar structure. Approximately 5% of individuals with spinal and sacroiliac TB also experience psoas abscess. The triad of presentation includes fever, loin discomfort, and limits in hip mobility, which may not be present in all individuals. Vigilant exams, epidemiological and radiological studies can all be used to make accurate diagnoses. The mainstay of treatment is medical or surgical draining of an abscess and the treatment of underlying diseases.

KEYWORDS

Psoas Abscess, Immunosuppression, Imaging Diagnosis, Prompt Treatment

CASE REPORT

In this case report A 44 years old male patient came with complaints of Back pain for past 1 month, Difficulty in walking, Vomiting, Fever, Loss of appetite and weight approximately 6 kg in two months. The patient was referred to our facility for final treatment after receiving conservative care at a nearby hospital. The patient experienced three comparable experiences in the previous 1month. he was treated symptomatically each time. After obtaining a thorough medical history, it was discovered that the patient had never had surgery before and patient was diagnosed with HIV June 2019 on ART and discontinued medication past two years (Irregular treatment), Not a known case of tuberculosis. The patient appeared skinny, and upon bedside inspection, it was discovered that the patient was malnourished and underweight for their age. He was discovered to be afebrile and had a pallor. He did not exhibit tachypnea or tachycardia and was found to be somewhat dehydrated. On physical examination patient lying in supine position with hip flexed, Unable to stand and difficulty in walking & extending the hip, Severe pain over lower back and gluteal region. A Boggy swelling of size 10 ×10 cm present over the right gluteal region, not warm, not tender, Other systemic investigations revealed that he was normotensive.

Diagnostic Imaging And Other Investigations:

Routine blood investigations were within normal range except for mild anemia (Hb – 9.7 g/dl) & Total count was 36000 cells /cubic millimeter, CD4 count was 212, USG gluteal region showed no collection, CT abdomen shows cystitis otherwise normal study. X-ray Lumbo sacral spine, hip and pelvis was normal, advised for MRI LS SPINE without contrast which came out as Bilateral ileo psoas collection extending to presacral space and bilateral paraspinous muscles(R>L). The collection measures approximately 10×4.7 cm on the right side and 7×3 cm on the left side, long with intervertebral disc prolapse (IVDP) L4, L5 (Figure 1). On contrast enhanced collection extends to the presacral area and bilateral gluteal region via sacral notch in intramuscular plane.

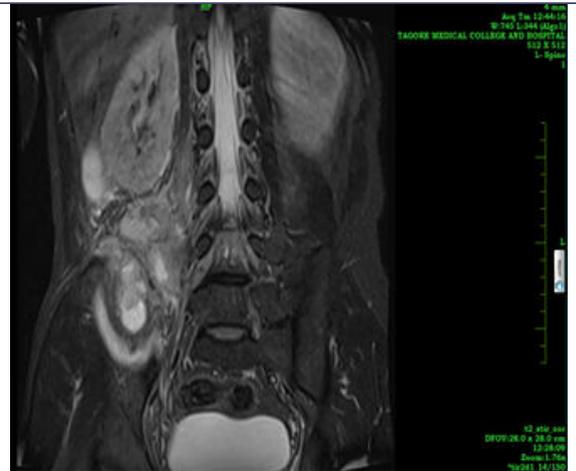
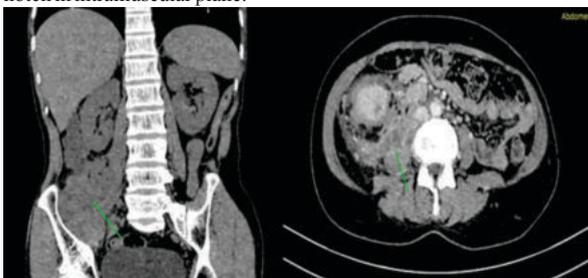


Figure 1: MRI & CT sections showing bulky right psoas

Course In The Hospital

The patient was initially treated with intravenous injection ceftriaxone 1 gm intravenous, injection paracetamol 1 gm intravenous, injection pantoprazole 40 mg intravenous for 7 days and i.v fluids like normal saline and ringer lactate were used then the patient was planned for open surgical drainage, Bilateral loin incision made and extra peritoneal approach was done, Intraoperatively about 500 ml of pus drained from both sides (FIGURE -2) and 32 F tube drain kept on both sides and microbiological pus and tissue culture was positive for mycobacterium TB (AFB positive)



Figure 2: loin incision with pus drainage

Post-operative Recovery Of The Patient:

postoperative the patient able to lie in supine position with normal extended hip & able to walk normally. Thoracic physician opinion obtained and was started on category 1 anti tuberculosis drug ,clinically patient condition improved & drain was removed and discharged on post operative day 13.

Patient was reviewed in general surgery out patients department after 2 months , there were no clinical, laboratory or radio-graphic signs of infection.

DISCUSSION

The iliopsoas compartment is an extraperitoneal area that houses the iliopsoas and iliacus muscles. The psoas major muscle originates in the transverse processes and bodies of the 12th thoracic and all lumbar vertebrae. Superiorly, it passes beneath the arcuate ligament of the diaphragm, proceeds downward across the brim of the lesser pelvis, passes beneath the inguinal ligament and in front of the capsule of the hip joint, and ends in a tendon that receives nearly the entire fibers of the iliacus muscle and is inserted into the lesser trochanter of the femur (1). The iliopsoas compartment is an extraperitoneal area that houses the iliopsoas and iliacus muscles. The psoas major muscle originates in the transverse processes and bodies of the 12th thoracic and all lumbar vertebrae. Superiorly, it passes beneath the arcuate ligament of the diaphragm, proceeds downward across the brim of the lesser pelvis, passes beneath the inguinal ligament and in front of the capsule of the hip joint, and ends in a tendon that receives nearly the entire fibers of the iliacus muscle and is inserted into the lesser trochanter of the femur (2). Primary psoas abscesses are less common than secondary, are most often monomicrobial and the most common bacterial organism isolated is *Staphylococcus aureus*, ranging from 42.9–88.4%(3,4). In patients with HIV infection, primary psoas abscesses have been reported as being more common than secondary and *Mycobacterium tuberculosis* was reported as more commonly isolated than *Staphylococcus aureus* in one series, where affected patients were more severely immunosuppressed [5], but it is unclear whether this is broadly applicable to HIV positive patients. Irrespective of HIV status, the management of psoas abscess involves careful evaluation for an infectious source, CT-guided drainage of abscess fluid, and appropriate antibiotic therapy, reserving surgery for relapsing cases or abscesses with septae [5] . With appropriate treatment there is a mortality rate of 2.4% in primary abscesses and 18.9% in secondary abscesses, although in an immunocompromised patient results may not be as good. Mortality in undrained cases approaches 100% (6). The prevalence of TB among HIV-positive patients is high, especially extra-pulmonary TB. And as such we need to maintain a high clinical suspicion of the more unusual presentations. Also we should not be surprised at the re-emergence of problems which were once more common (6).

CONCLUSION

Although psoas abscess is a rare entity, occasional cases are seen now and then. It requires that clinician must have high index of suspicion and may be conversant with the diagnostic imaging techniques , common etiologic agents and surgical techniques employed in the management of this condition.

REFERENCES

1. allick I, Thoufeeq M, Rajendran T. Iliopsoas abscesses. *Postgrad Med J*. 2004;**80**:459–462. doi: 10.1136/pgmj.2003.017665. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
2. Vaz AP, Gomes J, Esteves J, et al. A rare cause of lower abdominal and pelvic mass, primary tubercular psoas abscess: a case report. *Cases J* 2009;2:182.
3. Agrawal SN, Dwivedi AJ, Khan M. Primary Psoas Abscess. *Digestive Diseases and Sciences*. 2002;47(9):2103–5. [PubMed] [Google Scholar]
4. Navarro Lopez V, Ramos JM, Meseguer V, Perez Arellano JL, Serrano R, Garcia Ordonez MA, et al. Microbiology and outcome of iliopsoas abscess in 124 patients. *Medicine (Baltimore)* 2009;88(2):120–30. [PubMed] [Google Scholar]
5. Navarro Lopez V, Lopez Garcia F, Gonzalez Escoda E, Grogori Colome J, Munoz Perez A. Psoas abscess in patients infected with the human immunodeficiency virus. *Eur J Clin Microbiol Infect Dis*. 2004;23(8):661–3. [PubMed] [Google Scholar] [Ref list]
6. Ricci MA, Rose FB, Meyer KK. Pyogenic psoas abscess: worldwide variations in aetiology. *World J Surg* 1986;10:834–43