International Journal of Biomedical And Advance Research

ISSN: 2229-3809 (Online) Journal DOI:<u>10.7439/ijbar</u> CODEN:IJBABN

Case Report

Fungal iliopsoas abscess: A rare entity

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Abstract

Iliopsoas abscess is a rare entity that can present with unclear clinical features. The organisms responsible for infection are gram-negative germs (*Escherichia coli, Klebsiella* spp., *Pseudomonas aeruginosa, Proteus mirabilis, Enterobacter spp.) and gram-positive cocci (Staphylococcus aureus, Staphylococcus epidermidis, Streptococcus agalactiae, α-hemolytic streptococci, especially Streptococcus mitis)*. It can also be of tuberculous etiology. We present a rare case of Iliopsoas abscess caused by candida albicans.

Keywords: Iliopsoas abscess, Candida albicans

1. Introduction

Iliopsoas abscess was first described by Mynter in 1881 who referred to this as psoitis ¹. Depending on the presence or absence of underlying disease iliopsoas abscess may be classified as primary or secondary. Primary cause includes Diabetes mellitus, Intravenous drug abuse, AIDS, Renal failure, Immunosuppression^{2,3,4}. In over 88% of the patient with iliopsoas abscess, Staphylococcus aureus is the causative organism⁵. Crohn's disease is the commonest cause of secondary iliopsoas abscess⁶. Secondary iliopsoas abscess is commonly caused by streptococcus species (4.9%) and E coli (2.8%)⁵. Mycobacterium tuberculosis as a cause of iliopsoas abscess is common in the developing countries. The other causative organisms include proteus⁷, *Pasteurella multocida*⁸, *bacteroides*⁹, *clostridium*¹⁰, *Yersinia enterocolitica*¹¹, *Klebsiella*¹², methicillin resistant *Staphylococcus aureus*¹³, *salmonella*¹⁴, *Mycobacterium kansasii*¹⁵, and *Mycobacterium xenopi*¹⁶. Only few cases of *candida albicans* as a cause for iliopsoas abscess are described in the literature ¹⁷. We present one such case of iliopsoas abcess caused by candida albicans.

2. Case report

A 55 year old male presented in emergency department with a 7 days history of left lower abdominal, left lower limb and low back pain. There was no history of fever, chills, dysuria, trauma or mass per abdomen. There was no history of diabetes mellitus, tuberculosis or any other medical illness. Physical examination revealed typical psoas spasm and patient was lying with left hip joint flexed. There was minimal tenderness in left iliac fossa but no mass felt. Left thigh showed features of cellulites. There was no spine tenderness or deformity. His total white cell count was normal. Other blood investigations were normal. His spine x-rays were normal. Ultrasound revealed left iliopsoas abcess with subcutaneous

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edema of left thigh. Ultrasound guided aspiration was done which revealed pus. Pus was sent to clinical laboratory for culture, which revealed numerous candida albicans. Therapeutic aspiration was done under ultrasound guidance and patient was given oral fluconazole for 10 days. Patient's review course was uneventful and is doing well with 4 months of follow up.

3. Discussion

Iliopsoas abscess is a rare entity. Primary iliopsoas abcess is generally associated with immunocompromised state. The present case has no such features. Patients presents typically with classical signs of psoas abcess ie. Lower back pain, thigh pain, limping and psoas sign. All above features were present in our case. X-rays of spine was normal. Literature suggests magnetic resonance imaging or contrast computed tomography for early diagnosis. ¹⁸ Ultrasound can be helpful to diagnose psoas abcess as it was done in our case. Generally, psoas abscess is caused by gram-positive cocci (especially *Staphylococcus aureus*) or gram-negative bacteria. The present case is distinctive as it shown candida albicans as an unusual cause for psoas abscess.

4. Conclusion

Thorough clinical examination, Laboratory examination and suitable imaging modalities can help to make the accurate diagnosis of this rare entity. *Candida albicans* though it is not common but should be kept in mind to cause iliopsoas abcess.

References

- 1. Mynter H. Acute psoitis. Buffalo Med Surg J1881;21:202–10.
- 2. Herbon PM, Constenla RI, Lado FL, et al. Primary psoas abscess. An Med Interna 2004;21(1);501.
- 3. Korenkov M, Yucel N, Schierholz JM, et al. Psoas abscesses. Genesis, diagnosis and therapy. Chirurg 2003;74(7);677-82
- 4. Yin HP, Tsai YA, Liao SF, et al. The challenge of diagnosing psoas abscess. J Chin Med Assoc 2004;67(3);156-9.
- 5. Ricci MA, Rose FB, Meyer KK. Pyogenic psoas abscess: worldwide variations in etiology. *World J Surg* 1986;10:834–43.
- 6. Agrawal SN, Dwivedi AJ, Khan M. Primary psoas abscess. Dig Dis Sci 2002;47:2103-5.
- 7. Gruenwald I, Abrahamson J, Cohen O. Psoas abscess: case report and review of the literature. J Urol 1992;147:1624–6.
- 8. Steiner FT, Brem AS, Peter G. Psoas muscle abscess due to *Pasteurella multocida*. J Urol 1987;137:487–8.
- 9. Melissas J, Romanos J, de Bree E, et al. Primary psoas abscess. Report of three cases. Acta Chir Belg2002;102:114–17.
- 10. Wells AD, Fletcher MS, Teare EL, *et al.* Clostridial myositis of the psoas complicating percutaneous nephrostomy. *Br J Surg* 1985;72:582.
- 11. Kahn FW, Glasser JE, Agger WA. Psoas muscle abscess due to Yersinia enterocolitica. Am J Med 1984;76:947–9.
- 12. Chang CM, Ko WC, Lee HC, *et al.* Klebsiella pneumoniae psoas abscess: predominance in diabetic patients and grave prognosis in gas-forming cases. *J Microbiol Immunol Infect* 2001;34:201–6.
- 13. Madden BP, Datta S, Planche T. Pyogenic psoas abscess: a rare complication after orthotopic heart transplantation. *J Heart Lung Transplant* 2002;21:928–31.
- 14. Kindo AJ, Mathew R, Ravi A, et al. Rare co-existence of Salmonella typhi and mycobacteria tuberculosis in a psoas abscess—a case report. Indian J Pathol Microbiol 2001; 44:493–4.
- 15. Simms V, Musher DM. Psoas muscle abscess due to Mycobacterium kansasii in an apparently immunocompetent adult. *Clin Infect Dis*1998;27:893–4.
- 16. Prigogine T, Stoffels G, Fauville-Dufaux M, et al. Primary psoas muscle abscess due to Mycobacterium xenopi. Clin Infect Dis 1998;26:221-2.
- 17. Fukuhara S, Nishimura K, Yoshimura K *et. al.* A case of psoas abscess caused by *Candida albicans*. Hinyokika Kiyo. 2003 Mar; 49 (3):141-3.
- 18. Eric B. Tomich, David Della-Giustina. Bilateral Psoas Abscess in the Emergency Department. *West J Emerg Med*. 2009 November; 10(4): 288–291.