

An Interesting and Unusual Case of Recurrent Psoas Abscess

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Abstract

Psoas abscess (ilio psoas abscess) is a relatively rare clinical entity. Recurrent pyogenic psoas abscess is extremely rare and we have found three reported cases till date [1,4,6]. Psoas abscess may be primary or secondary. In India psoas abscess secondary to spinal tuberculosis is not uncommon. We present a case of primary, pyogenic, right sided psoas abscess in a 53 years male patient. In this case the large abscess was drained surgically and patient was treated with appropriate antibiotics. He was cured completely. After 4 months patient returned with fever, right flank pain and swelling almost like the 1st time. Repeat surgical drainage done and proper antibiotics were administered.

Keywords: Kidney; Spine; Psoas Abscess

Introduction

Psoas abscess is a rare medical condition where retroperitoneal collection of pus occurs in the iliopsoas muscle. Psoas infection is usually unilateral. Infection arises by hamatogenous spread or by contiguous spread from adjacent structures like colon, appendix, kidney, spine. Psoas abscess is commonly a pyogenic abscess but mycobacterium infection of spine (caries spine) is a common cause of psoas abscess in developing countries.

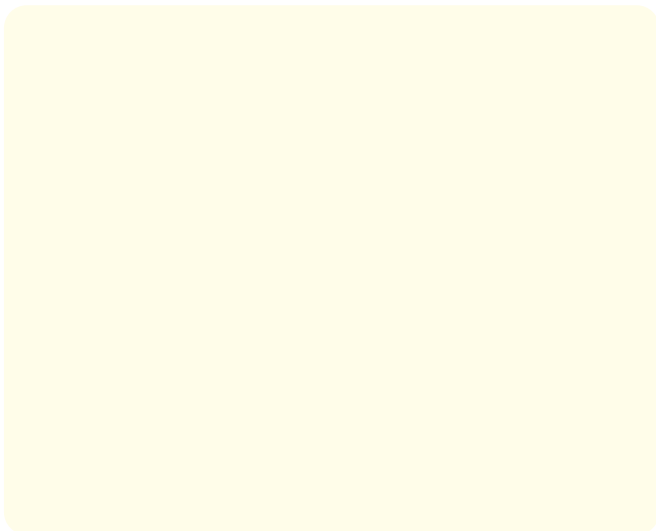
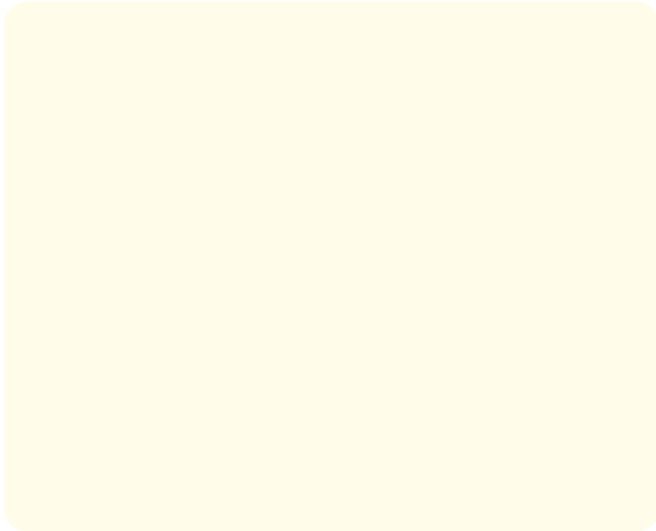
Case Report

A 52 years old male without any history of known medical comorbidity presented with fever for last 5 days, moderate to severe right flank pain and swelling and difficulty in walking. For last 1 day he had diarrhoea too.

Clinical examination revealed temp 100F, pulse 90/mnt. A swelling in the right flank (Figure 1) and tenderness.

Initial blood test revealed leucocytosis, raised ESR and CRP. CT scan of abdomen is the gold standard to diagnose a psoas abscess [5]. We did a CT abdomen and it gave a clear picture of loculated fluid dense collection in right lumbar, right iliac fossa and right paravertebral region measuring 87X93X75 MM (Figure 2).

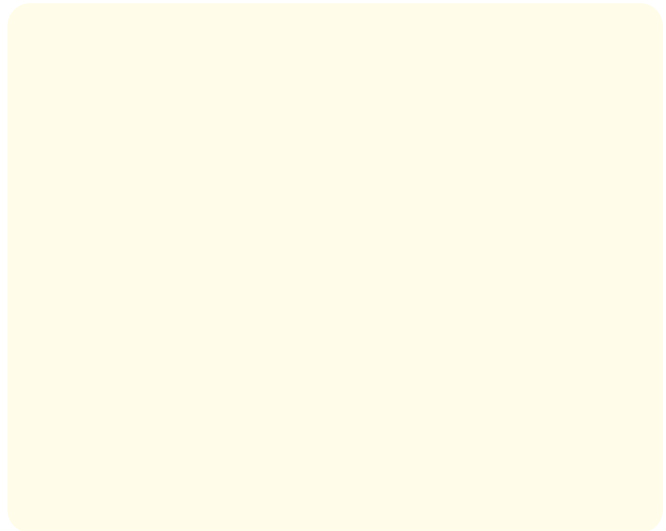
MRI LS spine showed right psoas abscess but no infective lesion in spine (Figure 3,4).



Exclude a secondary cause of the psoas abscess we sent urine routine and culture which later came out as negative. MRI of LS spine revealed no infective focus and USG KUB was normal. We also excluded inflammatory bowel diseases like Crohns.

We drained the psoas abscess surgically and around 1 ltr of pus was removed (Figure 5). Pus sent for Gram stain, Ziehl Neelsen (ZN) stain and culture sensitivity. Parenteral empirical antibiotic started keeping in mind Gm positive organism being the commonest cause

of pyogenic psoas abscess. Pus culture yielded Streptococcus sensitive to Linezolid. Appropriate antibiotics administered depending on the culture sensitivity report. Patient started improving clinically just after drainage of pus. Diarrhoea resolved from the very next day. Pain score improved and fever subsided within 48 hours. Repeat count showed a decreasing TLC. At 4 weeks CRP came down to normal along with other blood parameters.



Patient became asymptomatic and USG abdomen showed no residual collection.

After 4 months patient came back with fever, limping, right flank pain and swelling. Abdominal examination revealed right flank palpable swelling and tenderness. USG abdomen revealed accumulation of pus in retroperitoneal ilio-psoas region. We had to drain it again and pus sent for gram stain and culture sensitivity. This time we got *Staph. aureus*. Patient was given sensitive antibiotics. He became well within 10 days. CRP came to normal by 3 weeks.

Discussion

The psoas major is a long fusiform muscle having its origin from the transverse process of L1-L5 vertebrae, lateral aspect of vertebral bodies of T12-L4 and intervening discs of T12- L5 vertebrae. The muscle proceeds downward, passes beneath the inguinal ligament and in front of the capsule of the hip joint and is attached at the lesser trochanter. As it takes its origin from lumbar spine and also due to its close proximity to colon, appendix, ureter, kidney infection from these organs can spread easily to psoas.

Primary psoas abscess usually spreads by haematogenous route and in case of secondary psoas abscess infection spreads from gastrointestinal diseases like Crohns disease, diverticulitis, appendicitis or due to renal infection [2]. Psoas abscess secondary to spinal infection commonly mycobacterium infection [7] is not uncommon in developing countries.

Clinical presentation of psoas abscess is often vague and non-specific. Classical triad of fever, backpain and limping is found in around 30% of cases [8]. Other symptoms are flank pain, malaise, diarrhoea.

Limitation of hip movements is a presenting feature of psoas abscess. Hip extension stretches the psoas muscle, hence causes pain in case psoas abscess. This “psoas sign” is an important clinical sign.

A Large psoas abscess may cause compression of the iliac vein and may cause deep vein thrombosis.

Laboratory investigations like blood count may show a raised total leucocyte count, raised ESR and CRP. To diagnose a psoas abscess CT scan is considered as the gold standard [5]. USG is inexpensive, without radiation hazards but is inferior to CT scan in detecting psoas abscess. Ultrasound is diagnostic in only 60% [3,9] of cases.

Treatment of psoas abscess is drainage of abscess and appropriate antibiotic therapy.

Conclusion

Psoas abscess is relatively rare and often missed. Detection of psoas abscess is a diagnostic challenge. Due to its varied presentation a high index of clinical suspicion is of utmost importance. A delay in diagnosis and treatment may be fatal hence in case of suspected psoas abscess early imaging is helpful. Surgical drainage of pus along with appropriate antibiotics is the main stay of treatment. In our case the first episode and the recurrence both required surgical drainage of pus along with antibiotics. Patient did not have any further recurrence after the second surgery.

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