

Bilateral Psoas Abscess in Out Patients Department District Head Quarter Teaching Hospital Bannu

Habib Ullah Shah¹, Muhammad Shoaib Khan^{2*}, Nawab Zada³, Ishfaqullah Shah⁴, Atiq Ullah Shah⁵ and Raza Mohammad⁶

¹Department of Anatomy, Bannu Medical College, Bannu, Pakistan

²Department of Biochemistry, Bannu Medical College, Bannu, Pakistan

³Department of Physiology, Bannu Medical College, Bannu, Pakistan

⁴Department of Psychiatry, Hayatabad medical Complex, Peshawar, Pakistan

⁵Department of Biomedical sciences, Quaid-i-azam University, Islamabad, Pakistan

⁶Department of Medicine, Bannu Medical College, Bannu, Pakistan

***Corresponding Author:** Muhammad Shoaib Khan, Professor, Department of Biochemistry, Bannu Medical College, Bannu, Pakistan.

Received: October 24, 2019; **Published:** December 24, 2019

Abstract

Bilateral PSOAS abscess is an extremely uncommon cause of backache and having non classical presentation. We reported 18 years old lady who presented with pain in left lower limb. History clinical suspicion, laboratory investigations and finally ultrasound examination confirmed the case as MRI and CT imaging were not available. The patient was successfully treated with open surgical drainage, post-operative proper course of antibiotics and good follow up.

Keywords: Psoas Abscess; Surgical Drainage; CT and MRI

Introduction

Psoas muscles originate from 12th thoracic to 5th lumbar vertebrae in the retroperitoneum to lesser trochanter of the femur. Psoas abscess was first described by Mynter in 1988 [1,2] who referred this as "Psoitis". Psoas abscess may be primary or secondary depending upon its haematogenous origin or any other known cause [1,3]. Early diagnosis and in time management prevent further complications. CT and MRI imaging are investigations of choice but experience of the surgeon and ultrasounds examination also play important role. Drainage and appropriate antimicrobial chemotherapy are a definitive management. Drainage can be done by percutaneous CT drainage or open surgical [7,13].

Case Report

18 years old lady presented to OPD with pain upper and anterior parts of left lower limb for several weeks radiating from back for which she consulted different medical professionals including neurosurgeons and orthopedics. She was emaciated, pale looking and malnourished. Associated symptoms were tiredness early fatigue ability and shortness of breath on mild exertions. On clinical examinations the left hip was in mild flexion and she could not straighten her hip completely. SLR test was positive. There was no any visible swelling or tenderness of spine but there was slight stiffness of the lower para spinal muscles although reflexes and sensations were normal and the

patient was afebrile. Investigations including chest x-rays, x-ray lumbosacral spine, blood complete examination, including Hb, ESR, urinalysis, ultrasound examination of the abdomen and pelvis were done. X-rays were unremarkable, Hb 7g %, ESR 64%, U/S on 29/12/2011 showed bilateral psoas abscess, the left being 10.5 x 6.5 cm with posterior extension of 7.1 x 4.1 (Figure A) and on the right 12.4 x 9.1 cm. Further investigations such as C-reactive protein, blood sugar and urea, HBV, HCV and HIV were requested. CT scan and MRI facility were not available. C-reactive protein was 12 mg/L, HBV, HCV and HIV were negative. Patient was operated on next on 30/12/2011 on both sides via bilateral small skin crease incisions anterior and slightly superior to anterior superior iliac spines, retro peritoneally and draining huge abscesses about 1.5L on each side. About 5 ml of the purulent fluid were taken for cytological and biochemical examination revealing numerous pus cells, white blood cells, few red blood cells and gram positive cocci especially staphylococcus aureus. The cavities were washed with normal saline and mopped dry with sterilized surge gauze and large size drains were put in each cavity for self-drainage if any collections occur (Figure B). Patient was mobilizing 8 hours after surgery which aided further self-drainage. Patient was put on flagyl infusion IV 8 hourly, injection ceftriaxone 2g IV once daily and injection amikacin 500 mg IV after 12 hourly, IV fluid and analgesics as required. Patient was allowed orally after 24 hours. Drains were removed on 5th post op day as no pus was draining then. Patient was discharged on 09/01/2012 without undue complications and the recovery was prompt and smooth. Antibiotics were continued for two weeks. Patient was followed up on monthly bases, who showed continuous improvement in general health both physically and biochemically. ESR dropped to 30% and Hb raised to 12.5 gm%. After two weeks, the patient was put only on nutritional and physiotherapy and followed up ultrasound examination of the abdominal pelvis was done at 6 months showing no collection (Figure C).

Discussion

The presenting report indicates extremely rare and unique patient of 18 year of age with bilateral psoas abscess with Atypical symptoms of pain anterolateral aspect of left upper thigh and having mild to moderate flexion of the left hip with difficulty in straightening

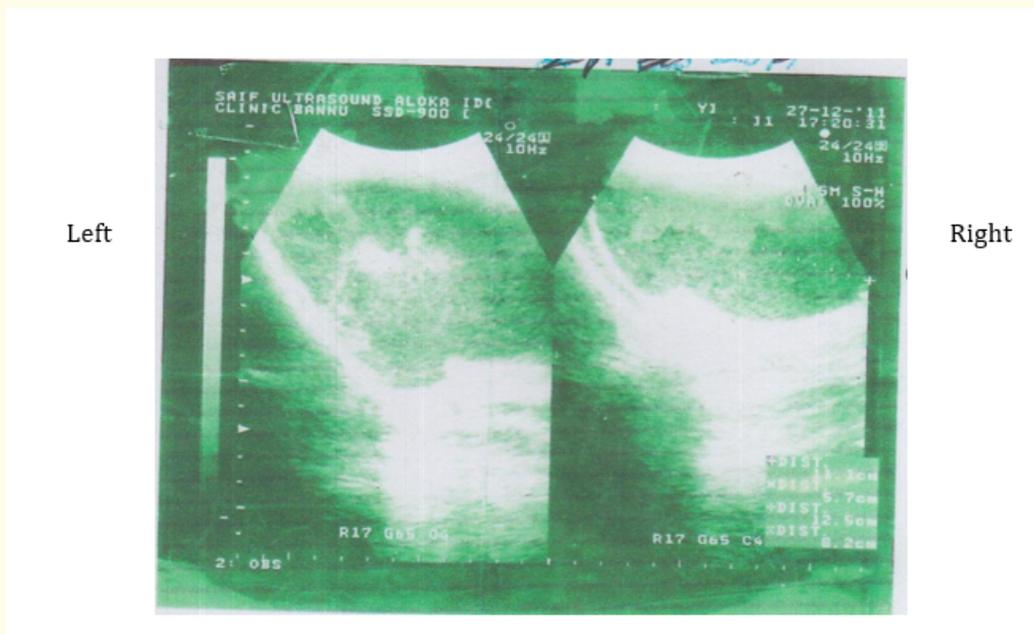


Figure A: Showing pre-operative.

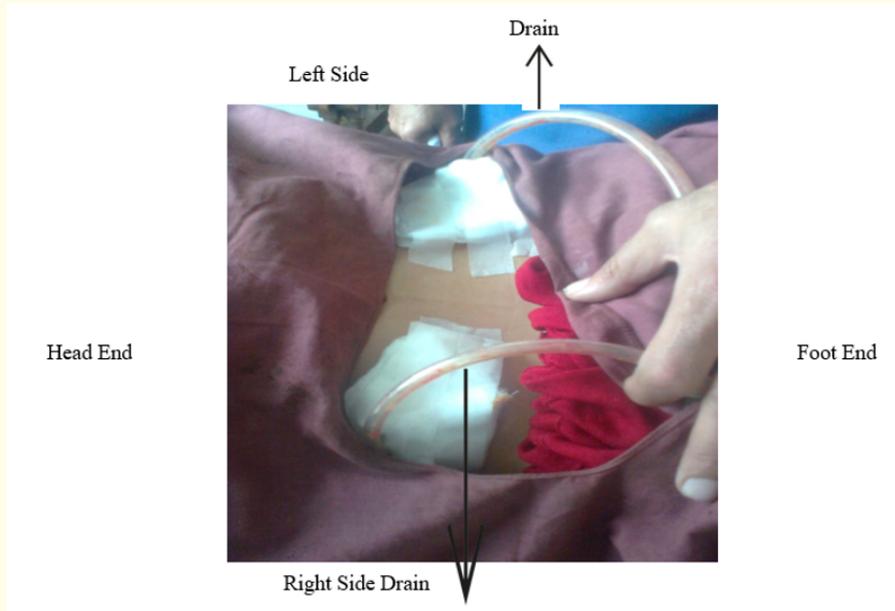


Figure B: Showing operative procedure.

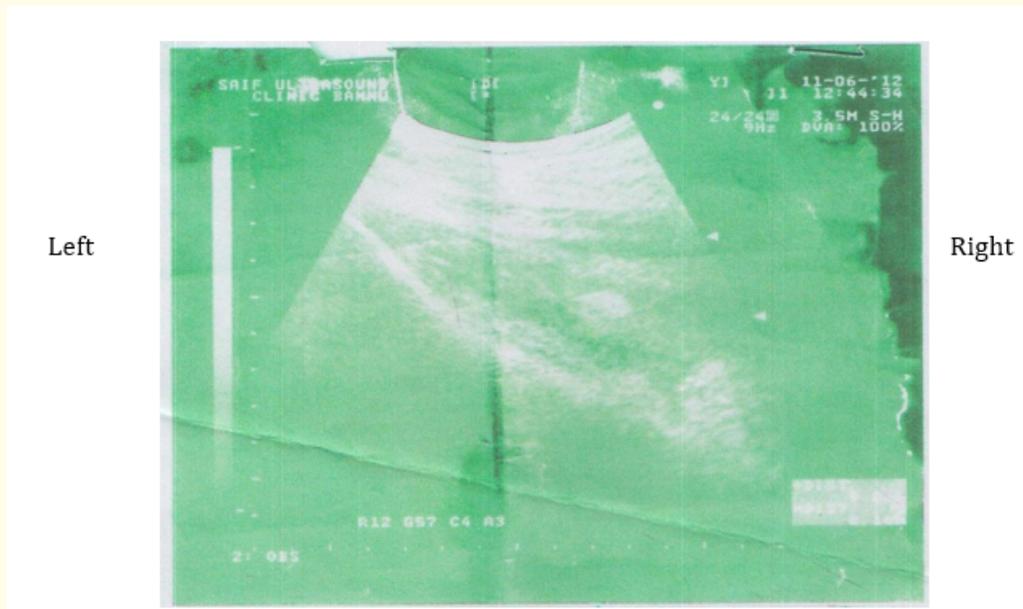


Figure C: Post-Operative after 6 months, showing no collection.

the leg. The typical symptoms of triad of presentations including fever, backache and psoas spasm (Limp) are present only in 30% of cases [1,9,15,16]. The reported case at presentation was emaciated, pale looking, malnourished, immunosuppressed condition with early fatigue ability and shortness of breath, afebrile having malaise, weight loss, anorexia and left upper thigh pain. This simulates with international available studies [1,4,6,15]. Psoas abscess is more common in those having history of diabetes, alcoholism, AIDS, renal failure, haematologic malignancies, immunosuppression, malnutrition, poverty, age below twenty years and male sex [1,4-6,10,11]. In the presenting case, other routine tests performed, were unremarkable except very low Hb (7 gm %), raised ESR (64%) and increased C-reactive protein (12 mg/L).

Our case of primary psoas abscess having unknown etiology, accounts for 99% in Asia while 61% cases were reported in Europe and is more common than secondary psoas abscess of known etiology [1,8]. Patient history clinical examination, vigilance of the attending physician, ultrasound examination of abdominal pelvis were the main tools for diagnosing this case as other radiological imaging of CT scan and MRI were not available in our setting although CT scan is regarded as the gold standard for diagnosis [1,6,11,16] and ultrasound sensitivity is 60% in diagnosis [8,12]. It is easily available, cheap, having no radiological hazards and can be repeated but is operator dependent.

The reported case was managed by open surgical drainage with wide bore drains placement in the cavities as facility for percutaneous drainage under CT scan were not available. Patient mobilized after 8 hours which further aided self-drainage of pus. These drains were removed on 5th post-operative day when no pus was drained anymore and no collection was detected on post up ultrasound examination. Patient was put on ceftriaxone, flagyl and amikacin post operatively which ideally achieves full coverage and were continued for two weeks according to the international literatures [1,9,15,16] which may be changed later on according to the culture and sensitivity test. Psoas abscess may be managed either by CT guided percutaneous drainage or open surgical drainage. Sometimes, PCD is done preliminary to open surgical method [7,14]. Open surgical method is reserved for situations where PCD fails or there is other intraabdominal pathology to be dealt at the same time or when there is contra indication to PCD [13]. Open surgical method for drainage having comparatively shorter hospital stay and some authors regards this as superior to PCD and having prompt recovery [16]. Inadequate or delayed treatment results in high mortality rate due to sepsis and non-drainage may results in 100% mortality [4,7,8,15].

Conclusion

It can be concluded from the present study that bilateral psoas abscess is a rare incidents of an uncommon cause of flank pain as psoas abscess. Presentation is often delayed and vague. Clinical examination and investigation may be helpful but above all, vigilance of the examining physician is of great help. Ultrasound is diagnostic in only 60% of the cases. CT scan is regarded as the gold standard but MRI is also helpful especially in discriminating soft tissues. Patients need hospitalization and percutaneous drainage (PCD) or open surgical drainage are, the two therapeutic options for managing such patients followed by antibiotics for two weeks. This means that early diagnosis, in time; appropriate and adequate treatment prevents further complications and is essential for cure of such patients.

Bibliography

1. IH Mallick, *et al.* "Iliopsoas abscess". *Postgraduate Medical Journal* 80 (2004): 459-462.
2. Mynter H. "Acute psoitis". *Buffalo Medical and Surgical Journal* 21 (1881): 202-210.
3. Taiwo B. "Psoas abscess: a primer for the internist". *Southern Medical Journal* 94.1 (2001): 2-5.
4. Thongngam T and McMurray RW. "Primary psoas abscess". *Annals of the Rheumatic Diseases* 60 (2001): 173-176.
5. Walsh TR, *et al.* "Changing etiology of iliopsoas abscess". *American Journal of Surgery* 163.4 (1992): 413-416.
6. Isdale AH, *et al.* "Psoas abscess in rheumatoid arthritis an in perspicuous diagnosis". *British Journal of Rheumatology* 33.9 (1994): 853-858.

7. Agrawal SN., *et al.* "Primary psoas abscess". *Digestive Diseases and Sciences* 47.9 (2002): 2103-2105.
8. Ricci MA., *et al.* "Pyogenic psoas abscess. Worldwide variations in etiology". *World Journal of Surgery* 10.5 (1986): 834-843.
9. Chern CH., *et al.* "Psoas abscess: making an early diagnosis in the ED". *American Journal of Emergency Medicine* 15 (1997): 83-88.
10. Paley M., *et al.* "Retroperitoneal collections etiology and radiology implications". *Clinical Radiology* 52.4 (1997): 290-294.
11. Zissin R., *et al.* "Iliopsoas abscess: a report of 24 patients diagnosed by CT". *Abdominal Imaging* 26.5 (2001): 533-539.
12. Huang JJ., *et al.* "Acute pyogenic iliopsoas abscess in Taiwan: clinical feature, diagnostic, treatment and outcome". *Journal of Infection* 40.3 (2000): 248-245.
13. Procaccino JA., *et al.* "Psoas abscess: difficulties encountered". *Diseases of the Colon and Rectum* 34.9 (1991): 784-789.
14. Haag JR. "Imaging intraabdominal abscesses and nonoperative drainage procedures". *World Journal of Surgery* 14.2 (1990): 204-209.
15. Eric B., *et al.* "Bilateral psoas abscess in the Emergency Department". *Western Journal of Emergency Medicine* 10.4 (2009): 288-291.
16. Santaella RO., *et al.* "Primary VS secondary ilio psoas abscess. Presentation, microbiology and treatment". *Archives of Surgery* 130.12 (1995): 1309-1313.

Volume 3 Issue 1 January 2020

©All rights reserved by Muhammad Shoaib Khan., *et al.*