

## A Rare Case of Tuberculous Psoas Abscess in Pregnancy

Gangadhara Rao Koneru<sup>1,\*</sup>, Rekha Prabhu<sup>2</sup>, Hema Gayathri A<sup>3</sup>, Haritha P<sup>4</sup>, Prabha Devi Kodey<sup>5</sup>

<sup>1</sup>Professor, <sup>2</sup>Associate Professor, <sup>3</sup>Assistant Professor, <sup>4</sup>Final year Post Graduate (MS), <sup>5</sup>Professor & HOD,  
Department of OBG, NRI Medical College & General Hospital, Chinakakani,  
Mangalagiri Mandal, Guntur District. Andhra Pradesh – 522 503, INDIA

**\*Corresponding Author:**

E-mail: profkgr@gmail.com

### ABSTRACT

*Psoas Abscess is a rare association with pregnancy. A 24 years old primi gravida with term pregnancy presented with PROM, oligo hydramnios, fever, tachycardia and inability to move both lower limbs. On examination, membranes were intact, there was bleeding PV with excess vaginal discharge. There was foetal tachycardia (180/min). To exclude abruptio ultrasound was done. Intra Uterine Death was diagnosed. That time patient was in early labour which was accelerated with syntocinon. Suddenly she became hypoxic and was ventilated. She delivered a stillborn baby. In the puerperial period patient suffered fever for more than a month. As fever was not controlled for long period (one month) CT was done which showed hypodense areas in right psoas muscle. CT guided Percutaneous drainage was failed. By MRI investigation, it was diagnosed as multiple abscesses with sacro illitis and was drained extra peritoneally. As fever is not controlled with broad spectrum antibiotics, montox skin was done which was strongly positive. Hence treatment with anti tuberculosis drugs was planned. Finally fever was controlled by antituberculosis drugs ISONIAZID 300 mg/day, REFAMYCIN 600 mg/day, ETHAMBUTOL 800mg/day, Inj. STREPTOMYCIN 1 gm/day as a therapeutic trail.*

**Keywords:** Tuberculosis, Psoas abscess, Pregnancy.

### INTRODUCTION

Primary psoas abscess in pregnancy is a rare entity and difficult to diagnose. Secondary psoas abscess in developed countries are due to gastro intestinal infections like appendicitis, Crohn's disease, diverticulitis and perforation of bowel malignancy. Other causes may be due to HIV, diabetes and pregnancy where the immunity is low. Most common organisms involved are staphylococcus, streptococcus, pseudomonas and E.coli <sup>(1)</sup>. Very often it is difficult to detect the infections and it will require CT, MRI studies <sup>(5)</sup>. Patient will develop oligo hydramnios, preterm labour, death due to uncontrolled infection and the foetus suffers from intra uterine growth restriction and intra uterine death. Patient usually presents with pain in the loins, gluteal region, inability to walk. Fever may not be present in all the cases. In this case patient improved after open drainage <sup>(3)</sup> and anti-tuberculosis treatment.

### CASE REPORT

A primi 24 years term pregnancy presented to labour room with oligo hydramnios, low backache with fever.

**On examination:** Temperature, tachycardia (188/min); RR 30/min; Foetal Heart Sounds 160/min with SPO<sub>2</sub> 90% with room air; GRBS 63 mg/dl, CVS & RS - NAD. Tachycardia was managed by

Cardiologist by IVABRODINE 5mg BD. Injection Lasix was given. She was in early labour, cervix 80% effaced 3 cm dilated. Membranes present. Vertex '0' station. Membranes were spontaneously ruptured at 3.30 p.m. Vertex at '0' station, as there was bleeding followed rupture of membranes, ultrasound was done to exclude abruptio placenta. Intra uterine death (still birth) was diagnosed. Blood, urine, vaginal cultures were done at different occasions during the period of pureperia (1 month). Several sensitive antibiotics were used, but fever was not controlled. CT was done, hypoechoec shadows noted in right ilio psoas muscle. Percutaneous drainage by aspiration failed. Hence, MRI was done and multiple abscess with right sacroilitis with sclerosis of articular margins identified. Retro peritoneal drainage under general anaesthesia was attempted. 150 cc of creamy pus was drained, even then temperature was not controlled. Postoperatively the pus was sent for tuberculosis PCR. It was inconclusive. As a therapeutic trial antituberculosis drugs ISONEX 300 mg, RIFAMYCIN 450 mg, ETHAMBUTAL 800 mg, Injections STREPTOMYCINE 1 gm IM was given. Temperature was controlled within 48 hours. Continuation of antituberculosis drugs for one year period was advised. Patient showed good prognosis with anti TB drugs and started walking after physiotherapy.



**Fig1:** T2 axial imaging shows oedematous sacro iliac joint in the form of hyperintensity suggestive of right sacro illi-itis



**Fig2:** Plain X-Ray pelvis showing erosions widening of right SI joint

## DISCUSSION

Secondary psoas abscess most often due to gastro intestinal infections in developed countries. Most common organisms for secondary abscess are staphylococcus aureus, streptococcus, pseudomonous, e-coli<sup>(1)</sup>. Secondary psoas abscess in this case is due to tuberculosis<sup>(2)</sup> right sacro illiitis. This might be there for more than 1 to 2 years. Tuberculosis is very common in India which flares-up in immuno compromised conditions like diabetes, pregnancy, HIV. In this case the infection is progressed to septicaemia, ARDS and metabolic acidosis. There was sudden IUD (still born). In the puerperal period, as temperature was not controlled (one month).

CT Abdomen showed hypodense areas in iliopsoas muscle. Percutaneous aspiration was tried but not successful. MRI showed multiple abscesses in iliopsoas muscle with involvement of right sacro iliac joint. SI joint infection is very rare in developed countries. Usually left side involvement<sup>(6)</sup> is more common but in this case the right side joint is involved. Pyogenic sacro illitis incidence 5-10% of all pyogenic joint infections. TB sacro illitis incidence 3-9.7% of all bone and joint TB. Very few cases of TB sacro illitis has been reported in literature<sup>(7,8)</sup>. Iliopsoas abscess diagnosis by ultrasound 40% possibility, with CT 80-90% and MRI 100%. Single abscess can be drained percutaneously by ultrasound / CT. Multiple abscesses better drained by retroperitoneal approach with open technique<sup>(3, 4)</sup>. 150CC creamy pus obtained but the cultures were inconclusive. Ultimately patient improved with anti-tuberculous drugs.

## CONCLUSION

Iliopsoas abscess should be considered in differential diagnosis of loin and gluteal pain, back pain and fever during pregnancy. Though it is uncommon, high suspicion and MRI study prevents delayed diagnosis and further complications like maternal septicaemia, shock, death and foetal complication like oligo hydramnios, IUGR and intra uterine death.

## REFERENCES:

1. Arch Surg. 1995 Dec;130(12):1309-13. Primary vs secondary iliopsoas abscess. Presentation, microbiology, and treatment. Santaella RO<sup>1</sup>, Fishman EK, Lipsett PA.
2. Scand J Gastroenterol. 2009;44(5):594-9. doi: 10.1080/00365520902745054. Iliopsoas abscesses: diagnostic, aetiologic and therapeutic approach in five patients with a literature review. Charalampopoulos A<sup>1</sup>, Macheras A, Charalabopoulos A, Fotiadis C, Charalabopoulos K.
3. Scand J Gastroenterol. 2009;44(5):594-9. doi: 10.1080/00365520902745054. Iliopsoas abscesses: diagnostic, aetiologic and therapeutic approach in five patients with a literature review. Charalampopoulos

- A<sup>1</sup>, Macheras A, Charalabopoulos A, Fotiadis C, Charalabopoulos K.
4. BMC Infect Dis. 2013; 13: 578. Published online 2013 Dec 9. doi: 10.1186/1471-2334-13-578; PMID: PMC3878923; Features and treatment modality of iliopsoas abscess and its outcome: a 6-year hospital-based study; Ming-Shun Hsieh,<sup>1,2,3</sup> Shih-Che Huang,<sup>1</sup> El-Wui Loh,<sup>4</sup> Che-An Tsai,<sup>5</sup> Ying-Ying Hung,<sup>6</sup> Yu-Tse Tsan,<sup>1,2</sup> Jin-An Huang,<sup>1,7</sup> Lee-Min Wang,<sup>1,8,9</sup> and Sung-Yuan Hu<sup>1,2,3,10</sup>
5. Obstet Gynecol. 2002 May;99(5 Pt 2):906-9; Primary psoas abscess complicating a normal vaginal delivery. Shahabi S<sup>1</sup>, Klein JP, Rinaudo PF.
6. Eur Spine J. 1997 Sep; 6(5): 330-331. doi: 10.1007/BF01142680; PMID: PMC3454597; Tuberculosis of the sacroiliac joint, G. Vaiopoulos,<sup>1</sup> P. P. Sfikakis,<sup>2</sup> E. Velikas,<sup>3</sup> C. Kittas,<sup>4</sup> and P. Kaklamanis<sup>1</sup>;
7. Postpartum Tuberculous Sacroiliitis Krishnakumar R. Nair, MBBS, DNB, D Orth, MNAMS, and Renjitkumar Jayachandran, MBBS, DNB, D Orth; The American Journal of Orthopedics® February 2013; pg E16 & E17
8. Tuberculous Sacroiliitis Associated with Pregnancy: A case report. Song KJ; Song SH; Park HJ - Pregnancy; Tuberculous; Pelvis; Patients; Delivery; Journal of Korean Society of Spine Surgery 2001; 8(4): 548-551.