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CASE REPORT

TUBERCULOSIS IN PREGNANCY: VARYING PRESENTATIONS

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ABSTRACT: Pregnancy being on immunocompromised state any latent infection can become active during that period.[1] TB in pregnancy may present as pulmonary or extra pulmonary depending on site of infection. The greatest burden is in the reproductive age group. TB may be misdiagnosed during pregnancy due to overlap of symptoms like fatigue, nausea, vomiting and back discomfort. Here we are presenting three cases of extra pulmonary TB in pregnancy- spinal, meningeal and peritoneal and one case of active pulmonary tuberculosis with IUGR.
KEYWORDS: Tuberculosis, Pregnancy Pulmonary, Extra pulmonary.

INTRODUCTION: Tuberculosis is a common bacterial infection which can produce increased morbidity and mortality in pregnant women and the new born unless treated in time. Though there is a global fall in Tuberculosis, it is still a major public health problem in India.[2] India accounts for 1/5 of TB cases each year. 1/3 of global populations are still carriers and the greatest burden in the reproductive age group. About 80 % of the newly detected cases seen in the 22 countries distributed in Asia and Africa which are called high burden countries (HBC). India is one among those HBCs.

We report a few interesting cases of tuberculosis complicating pregnancy that came across in our department during the last one year.

CASE NO. 1: 28 year old $G_2P_1L_1$, a case of previous caesarean section attended the OPD at 24 weeks with complaints of pain in the back and the lower abdomen. Treated with analgesics, thinking that it was pregnancy related symptom, after excluding urinary tract infection.

One week later she again reported with pain radiating to legs. This time a neurology consultation was done but could not find out any organic cause and treated symptomatically.

At 30 weeks she was admitted with fever, cough which was not responding to antibiotics Sputum for AFB was found negative.

Mantoux Test Negative: X ray chest after shielding the abdomen showed bilateral lower zone and mid zone infiltrates; suggestive of military TB (Figure 1), she was started on DOTS three days in a week and she responded very well.

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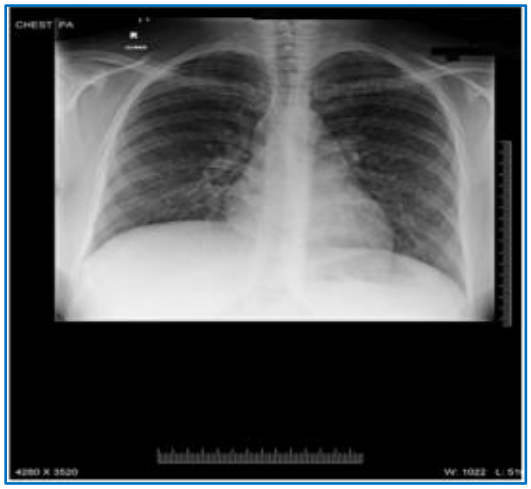

Fig. 1

Emergency LSCS done when she came in labour. Immediate post-operative period was uneventful and discharged on 4th post-operative day.

On 9th post-operative day she reported with pain radiating to legs and numbness of legs.

MRI lumbosacral spine was done –showed TB osteitis at L4 –L5 level with abscess extending from L4 –S1 (Figure 2)

The lesion showed complete obliteration of central canal with compression of cauda equina nerve roots.

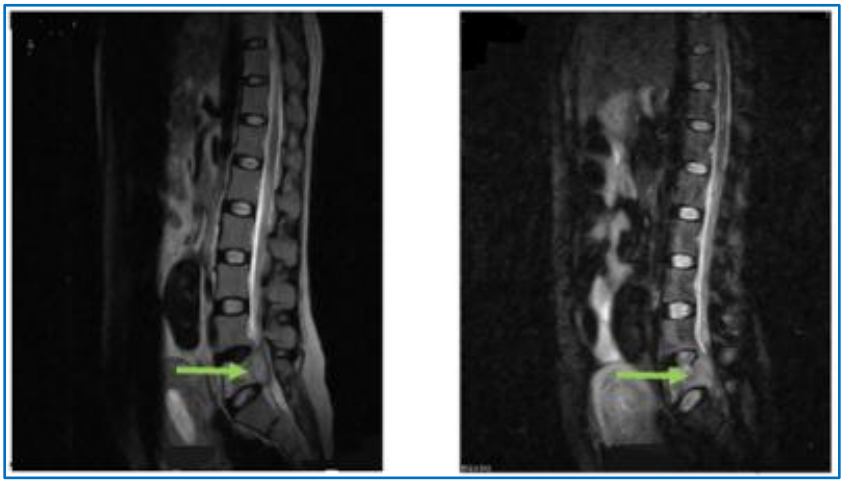

Fig. 2

LAMINECTOMY DONE AT L5 LEVEL AND LOWER PART OF L4: At L4 and L5 level abscess cavity external to dural sac with thick walls and central necrotic tissue. Abscess cavity excised completely and send for HPE and AFB smear.

HPE: Caseating granulomatus lesion consistent with tuberculous abscess.

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SMEAR FOR AFB: Negative.

Anti-tubercular drugs where converted as daily dosage along with steroids.

Now the condition of the patient improved and she is on regular ATT.

DIAGNOSIS: Miliary TB complicating pregnancy with dissemination into the spine.

CASE NO. 2: 26 year old primi gravida was admitted at 26 weeks of gestation with complaints of fainting attack suggestive of fits No other positive finding. Neurological evaluation done and started on anticonvulsants.

MRI was advised but the patient was not willing.

She developed a similar episode at 34 weeks of gestation also and the anticonvulsants continued.

She had a normal delivery at term. MRI evaluation done post-partum, which showed tuberculoma of the brain. She was treated with anti tuberculous drugs and steroids for a period of 9 months.

After that she was asymptomatic.

DIAGNOSIS: Extra pulmonary TB in pregnancy presenting with seizures.

CASE NO. 3: 34 year old $G_2P_1L_1$, a case of previous caesarean section, GDM and anaemia was admitted at 26 weeks with complaints mild fever and cough with expectoration. She did not respond to routine antibiotics. Sputum was sent for AFB, culture and sensitivity.

SPUTUM SMEAR: Positive for AFB.

X RAY CHEST: Right lower lobe consolidation (Figure 3).

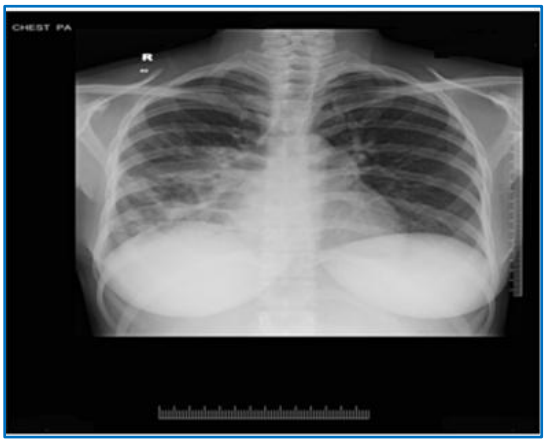

Fig. 3

She was started on ATT (category I).

At 35 weeks, emergency was LSCS done for IUGR and absent end diastolic flow.

Delivered low birth weight baby: 1.93 kg.

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DIAGNOSIS:

- Active pulmonary TB complicating pregnancy.
- With GDM & Anaemia resulted in IUGR.

CASE NO. 4: 32 years old G2P1L1 had elective LSCS at 39 weeks. Post operatively she developed cough for a period of one week which was managed symptomaticaly.

54 days after surgery she reported back with history of fever and chills of 10 days duration. She was febrile with slight distention of abdomen on admission.

Blood investigation showed anaemia and a decrease in total protein and a reversal of A/G ratio.

USS: Showed moderate ascites with localised fluid collection in the lower quadrant. Diffuse omental fat inflammation and sub involuted uterus.

CT ABDOMEN: Showed localized collection of fluid in the pelvis with moderate ascites.

ASCITIC FLUID: showed increased ADA (Adenosine deaminase–58 units per litre) suggestive of tuberculosis.

AFB: Was negative in the ascitic fluid.

CULTURE: No growth of bacteria.

Since fever was persisting, laparotomy was done which showed straw coloured ascitic fluid about 2 Litres. Pus flakes over peritoneum and bowel surface. Organised abscess in POD and rectosigmoid area. Biopsy taken from omentum, peritoneum and the mesentery.

HPE:

- Chronic granulomatous lesion suggestive of TB.
- She was started on ATT and her condition improved.

DIAGNOSIS: Abdominal tuberculosis presented with ascites.

DISCUSSION: Pregnancy as such is an immunocompromised state so any latent infection can become active at this state.[3] About 1/3 rd of global population are carriers of mycobacterium tuberculosis. The incidence of TB in pregnancy is 98.4/100000. Tuberculosis is broadly classified in to pulmonary and extra pulmonary depending on the site of infection.

Pregnancy does not have any adverse effect on the course of the disease, but the effects of tuberculosis in pregnancy is affected by many factors like severity of the disease, how advanced the pregnancy is at the time of diagnosis, presence of extra pulmonary spread, HIV co infection and other co morbidities like DM,malnutrition,anaemia.[4]

The adverse effects on pregnancy are infertility, abortion, ectopic pregnancy, IUGR, pre-term labour, low birth weight babies, congenital TB and neonatal infection.[1]

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Symptoms of TB in pregnancy are similar to a non-pregnant woman, but some of them are un aware of symptoms. Pulmonary symptoms are seen only in 1/3 rd of women. The common extra pulmonary presentations are ascites, meningeal TB, potts spine, TB lymphadenopathy, tuberculous pyelonephritis and perineal abscess.[1]

The symptoms of TB have significant overlap with the symptoms of pregnancy including fatigue, malaise, anorexia, nausea and vomiting, weight loss and abdominal and back discomfort. So tuberculosis is undiagnosed frequently in pregnancy leading to delay in treatment.[1]

Higher incidence of Congenital TB has been reported in patients with extra pulmonary manifestation.[5]

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