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Case study

**PERITONEAL TUBERCULOSIS IN PREGNANCY: A RARE OCCURRENCE**

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**Abstract**

Extrapulmonary tuberculosis is least common form of tuberculosis in pregnancy, early diagnosis of which will help to reduce maternal and neonatal morbidity and mortality. My patient is 25 years old primigravida admitted with Ascitis, Anorexia, low grade fever on and off. Diagnosed as peritoneal tuberculosis after abdominal fluid sent for AFB culture. Patient was given Antitubercular treatment. Ascitic fluid gradually declined and pregnancy moved on but patient landed up in preterm labour and delivered baby which the pediatrician was unable to save because of extreme prematurity.

**Key words:** peritoneal tuberculosis; hypertension; ascites; pregnancy

**Introduction**

Extra pulmonary tuberculosis is a least common form tuberculosis in pregnancy (Loto and Awowole, 2012). I present here a case of pregnancy with peritoneal tuberculosis. Objective of my presentation is early diagnosis and early treatment of such misdiagnosed patients in order to reduce maternal and neonatal morbidity and mortality.

**Case History**

My patient is a primigravida, 25ys old, belongs to low socioeconomic status with 24 wks pregnancy, abnormally increasing abdominal girth since 2 months, severe discomfort in last 10- 15 days, dull aching abdominal pain, low grade fever on and off, anorexia.

She has similar complaints since 1-2 months. She was seen by a practitioner 1 month back, was recorded with a high BP 160/100mmHg and was started antihypertensive. She reported to the same practioner about 15 days ago and was advised termination because of increasing ascites attributing to high BP. Patient and attendants refused for termination

She visited us with chief complaints of abdominal discomfort and fever.

On examination, she was lean and thin with marked abdominal distension, normal temperature and Blood pressure

Per abdomen examination -- abdomen distended, uterus found as if floating in fluid about 22-24 weeks in size, fluid

thrill present, dullness on percussion. Laboratory investigation showed decreased Hb, leucocytosis, normal platelet count, ESR markedly raised, CRP high, CA-125 marginally raised, HBsAg and HIV negative, RFT, LFT and Urine microscopy normal.

Sonography revealed -Fluid in abdomen and peritoneal thickening. Fetus- Single live fetus 23 weeks, No adenaxal mass. It was decided to tap abdominal fluid under USG guidance and sent for examination.

Ascitic fluid examination- lymphocytosis, raised proteins, No malignant cells, ADA value raised 76IU/ml.

Patient now has well controlled BP, no edema, no finding in urine, no other sign and symptoms of high BP. Patient has no past or family history of adnexal mass, no adnexal mass in USG, CA-125 though raised was not supporting malignancy.

**Why Abdominal Fluid?**

**What Clinched Diagnosis of Tuberculosis?**

1. Localised collection
2. Family history of tuberculosis under treatment
3. Raised ascitic fluid ada levels.

So decision for diagnostic laparoscopy was made: 2 liters of peritoneal fluid drained, peritoneal biopsy taken.

Histopathology confirmed chronic granulomas with caseous necrosis and multinucleated giant cells.

Patient was started on Anti tubercular treatment HRZE for 2 months and HRE for 4 months.

Pregnancy was continued, patient was discharged on request after 10 days with proper counseling to take medicines regularly and on her next visit after 2 weeks - abdomen soft, 26-28 wks gestation.

Patient reported after 10 days of second visit with pain abdomen and leaking per vagina. On examination 28 wks pregnancy with 5 – 6 cm dilatation, membrane absent. She delivered a premature baby was kept in NICU because of low birth weight and respiratory distress. Unfortunately we lost the baby after 2 days of NICU care. .



**Fig. 1:** Sonography of fetus, ascitic fluid and laparoscopy picture

## Discussion

It is challenging to diagnose tuberculosis in pregnancy because of the non-specific nature of early symptoms of infection such as malaise and fatigue, which may be attributed to pregnancy, the normal weight gain in pregnancy may temporarily mask the associated weight loss (Effern, 2007; Maddineni and Panda, 2008; Adhikari, 2009).

High level of suspicion is required to diagnose tuberculosis in pregnancy with proper history exploring the risk factors of T.B and enquiry about symptoms suggesting infection (Effern, 2007; Maddineni and Panda, 2008; Adhikari, 2009).

Extra pulmonary T.B contributes to 50% of cases in pregnancy according to recent study (Knight M, Kurin czuk JJ, Nelson Piercy C, Spark.P, Brock lehurst P, 2009).

Peritoneal tuberculosis occurs either because of hematogenous spread of active lung infection or

reactivation of latent infection (Marshal JB , 1993 ). Peritoneal tuberculosis should be suspected in ascitis during pregnancy it is difficult to identify peritoneal tuberculosis in pregnancy by radiological evaluation and laboratory. Accurate diagnosis requires histopathological examination of specimen obtained by image guided biopsy or exploratory laparotomy or diagnostic laparoscopy.

Obstetric complication of tuberculosis include include spontaneous abortion, preterm labour, LBW, increased neonatal mortality (P.Ormerod, N.K. Jain, J. Kishan, Sailaja, and S.Kaur 2001).

So early diagnosis and early treatment are key to healthy mother and baby.

## Conclusion

So, we recommend thorough history and high degree of suspicion to diagnose tuberculosis in pregnancy. This will not only decrease burden of disease in population but will also decrease neonatal and maternal morbidity and mortality.

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