

# **A Rare Case of Meningeal Tuberculosis during Pregnancy**

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## **Background**

Tuberculosis (TB) is a rare disease encountered in the United States with 9,272 cases in 2017, or an incidence of 2.8 cases per 100,000 people. Most new cases are reactivation of latent TB. Worldwide, 10.4 million people are infected each year, with 1.7 million deaths. Meningeal TB accounts for 5 percent of all TB cases.

## **Purpose**

Untreated TB in pregnancy presents a grave threat to both patient and infant; the benefit of therapy outweighs the risks of the medication. The CDC recommends initiation of therapy as soon as possible in a pregnant patient with a moderate to high risk of TB. Due to lethality of meningeal TB, treatment should be completed if suspected.

## **Methods**

A 32-year-old G2P1001 female of Indian descent at 8-weeks gestational age presented initially with altered mental status and symptomatic hyponatremia. The patient underwent ventriculostomy for cerebral edema with ventriculoperitoneal shunt placement and an extensive infectious disease work-up. Ultimately, it was concluded her meningitis was most likely due to TB, and she was treated with RIPE therapy that was stopped after a negative AFB CSF culture. She was discharged to inpatient rehabilitation before being readmitted five months later for sudden decline in daily function and mentation. Ultimately, the patient had a fetal demise after a seizure and was induced at 28 weeks. Brain biopsy one day before patient death revealed granulomatous TB lesions.

## **Results**

Patient declined after discontinuation of RIPE therapy and ultimately suffered from worsening cerebral edema and seizure. Her pregnancy ended in fetal demise, and, one week later, she died of pulseless electrical activity.

## **Conclusion**

TB, and especially meningeal TB, is rarely encountered in the U.S., especially amongst pregnant patients. Symptoms include hydrocephalus, stroke, seizures, and other neuro sequela. Prompt evaluation by Neurology/Neurosurgery for these symptoms in a pregnant patient is recommended.