

## **Drug Resistant Pulmonary Tuberculosis**

2023 Challenging Case Session February 24, 2023

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## **History and Physical**

#### History

34 y/o Philippine F, in U.S. since 2017, No TB contact

CC: cough for 1 year, pink tinged sputum, 5 lb weight loss

Past Med Hx: DM Type 2, asthma, Covid PNA Dec 2021.

Nonsmoker. Previous nurse in the Philippines. Stay at home mother. Lives with husband, 8 y/o & 2 y/o son, and brother.

No sick family members.

Meds: metformin, albuterol inhale

Physical Exam: Lungs clear. Afebrile.

Labs:

Covid test Neg. Pos QFT. HIV NR. WBC 16. Glc 301 HbA1c: 11

HCG: positive. 5 weeks AOG by LMP.

OB US: gestation 6 wks. Fetal bradycardia.

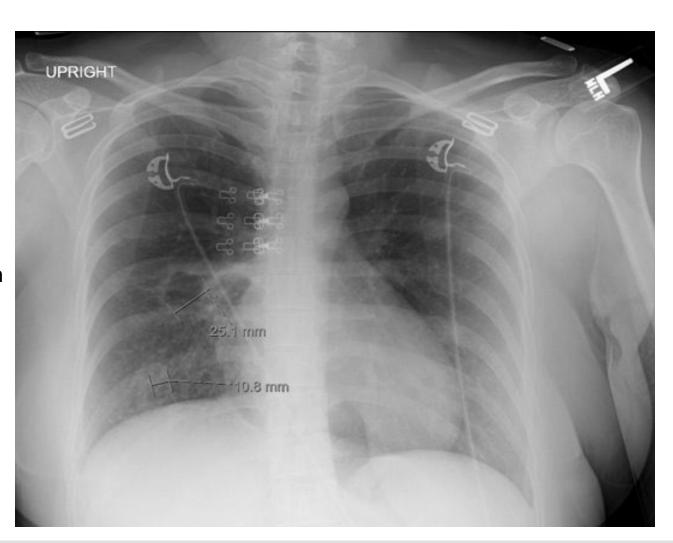
Pregnancy unknown to the patient



# VUMC CXR 5/2

CXR: cavitary lesion in R midlung

cavitary lesion R lower lung



### **Treatment**

Sputum smear <1, PCR pos MTB, rifampin resistant.

CDC MDDR and FL SNTC: resistant to RIF, INH

Sensitive to PZA, EMB and Ethionamide

Diagnosis: Multidrug resistant TB (MDR) Pulmonary TB

Later: SNTC: Resistant to Capreomycin

No mutation to BQ, Linezolid, fluoroquinolones, EMB

Diagnosis changed to: *Pre-extensively DRTB (pre-XDR-TB*)

MDR: R to INH and rifampin & R to Fluoroquinolone

or MDR & R to any 2<sup>nd</sup> line injectable aminoglycoside

Started BPaL: Bedaquiline (BQ), Pretomanid, Linezolid



### **Outcome**

Unfortunately, the baby did not survive.

BPaL initiation: minimum issues:

mild HA, diarrhea x 1 day, heartburn x few days

mild ALT elevation: 54 (N: 5-50)

WBC normalized. CXR improved. BPaL drug levels normal.

Sputum culture converted 2 weeks after start of tx.

Completed 26 weeks BPaL.

Post treatment followup recommendations per SNTC protocol: 1, 2, 3, 6, 9, 12, 15, 18, 21 and 24 months.

On 3<sup>rd</sup> month post treatment. Currently still doing well.

Thank you!

