



TB Nurse Case Study Standard Treatment Therapy November 2022

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Objectives

- ▶ Necessity of optimal treatment therapy for TB disease
- ▶ A look at gold standard of treatment previously 11 years ago vs. the gold standard of treatment today

Case History

- ▶ Patient is a 28 yo woman with cavitory smear positive pulmonary TB. The patient is from Mexico and arrived in the US on 6/1/2004. The patient had mild COVID in Sept 2021. She stated that she had a persistent cough from that time onward. She had no fever, chills, sweats, or wt loss. She developed pleuritic chest pain on ~8/2/22 and went to the ED and was admitted on 8/4. CTA Chest showed UL predominant bilateral pulmonary opacities with bronchiectasis and cavitation w/mediastinal and hilar adenopathy. A bronch was performed on 8/5 with Bronch Wash smear positive, as was TB PCR w/ negative katG (Mayo) and rpoB (Mercy) mutations. TB therapy "RIPE" was initiated on 8/9 during hospitalization. Patient was discharged on 8/11/22 on DOT through the STL County DPH.
- ▶ Patient was previously treated for pulmonary TB at STL County DPH from 11/17/2010-6/30/2011 with the standard regimen. Patient had cavitory smear positive disease and was on daily DOT from 11/17/10-1/13/11. Patient was smear and culture negative at 8 weeks. As was the practice then, she was treated with Bi-weekly DOT for the remainder of therapy. She was nonadherent with clinic f/u, but was adherent with DOT visits, patient was treated for nearly 8 months and was considered to have completed therapy.
- ▶ Patient had a 6-month-old child at the time who was treated for LTBI(+12mm PPD) with INH 300 mg & B6 25 mg from 11/5/10-8/11/11
- ▶ Patient has 3 children, a 12 y/o who was treated for LTBI previously in 2010/2011 at 6 months old, an 8-year-old and a 10-month-old infant

Challenge #1

- ▶ Establishing household members and contacts and educating patient on isolation definition.
- ▶ During one of our DOT visits our nurse noted a child in the home that was not one of the patient's children.

Overcoming Challenge #1

- ▶ We did home daily visits and in office visits to establish household members and contacts. However, thru many attempts we have not been able to get all the contacts screened.
- ▶ We were able to screen all 3 children, and child that was over while patient was on isolation, but not the patient's husband or her parents—all 3 of them have refused.
- ▶ Patient's grandfather was previously treated for TB in 2010-2011 as well. Patient's husband (who was her boyfriend previously) was also started treated in 2010-2011, but he did not complete treatment course

Challenge #2

- ▶ We have had to make several phone calls to patient to schedule our DOT visits for both patient and 10-month-old infant, and some of those would have to come from different phone numbers to get patient to answer and schedule DOT visit time.

Overcoming Challenge # 2

- ▶ We were able to establish a set time to come to do DOT treatment for patient and 10-month-old at the same time every day that worked for their schedules to make it our daily routine.
- ▶ We offered patient the opportunity to start EDOT for both her and her 10-month-old infant, however patient unsure of doing EDOT for her 10-month-old infant and doing it correctly so patient would prefer a nurse come and do DOT visits daily for both instead

Challenge #3

- ▶ We have had struggles convincing patient that her 10-month-old infant would be on “Window therapy” for 8-10 weeks once patient was off isolation, patient was insistent that the ID doctor who is treating the 10-month-old stated the infant would only be on the window therapy for 8-10 weeks. Therefore, patient had not refilled the infant's prescription because the infant had already had 1 additional refill and was convinced, she would not need the next refill. Also, patient was not taking infant for her follow-up visits.

Overcoming Challenge #3

- ▶ We reached out to ID physician and kept open communication with her office and NP to inform patient of treatment regimen for 10-month-old infant
- ▶ They were able to get patient to bring infant in for follow-up visit and informed patient on the full 8-10 week “window therapy” treatment timeline.
- ▶ Patient picked-up infant's medication refill and 10-month-old infant continues to take Rx for window therapy via DOT visits

Challenge #4

- ▶ Getting patient to start window therapy treatment for her other two children, the 8 y/o and the 12 y/o (previously treated 11 yrs ago when she was 6 months old)
- ▶ Patient started 10-month-old on “window therapy” through ID physician, but has not taken her two older children to ID physician to get them started on any treatment

Overcoming Challenge # 4

- ▶ We have scheduled appointments for patient to bring both older children to Chest Clinic at STL County DPH
- ▶ We have rescheduled this appointment on 2 different occasions, so we have not overcome this challenge yet

Teaching Points/Points for Discussion

- ▶ Importance of communication, home visits and educating patient and family on TB disease and treatment regimen
- ▶ Treatment therapy for children in household, and the importance of starting them on recommended treatment regimen for best possible outcome and to prevent them from developing TB disease
- ▶ Importance of open communication with treating physicians and DOT case management

Standard Treatment Therapy

▶ Thank You

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