BPaL IN A 15-YEAR-OLD

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BRIEF HISTORY

• Healthy 15-year-old male with a history of IGRA conversion 2 years prior following household exposure to MDR-TB (INH and rifampin resistant) and refusal to take treatment for LTBI.

• Presented with a 2-week history of intermittent hemoptysis and hematemesis.

• Significant cultural, language and socioeconomic barriers to care.

• Extensive microbiologic work-up was negative
TREATMENT REGIMEN

Based on the source case susceptibilities, concern for compliance with a prolonged treatment regimen, and in consultation with national experts, we recommended BPaL treatment regimen, acknowledging that experience with BPaL in this age was extremely limited.

- Bedaquiline (400 mg x 2 weeks, then 200 3x/week),
- Pretomanid (200 mg)
- Linezolid (600 mg)

Significant effort on behalf of medical, public health and school-health personnel was required to maintain a collaborative relationship with the patient’s mother who was persistently skeptical of the diagnosis and the need for treatment and to help navigate barriers to care.
TREATMENT MONITORING

• Compliance with monitoring was extremely difficult

• TDM performed for all drugs after 2 months of treatment, and linezolid trough repeated after approximately 4 months.

• All levels were within targeted ranges.

• Linezolid was 0.55 mcg/mL after 2 months and 1.07 mcg/mL after 4 months on a daily dose of 600 mg

• No lab or EKG abnormalities were detected
DISCUSSION
FOLLOW UP

• The patient completed 128 doses with fewer than 5 missed days. He had no physical side effects during the treatment course, though he did struggle with depressive symptoms for approximately 2 months after treatment initiation.

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