

Case-based Activity: Drug side-effect and Management issues

Participant Workbook

Case 1

History: 58 year-old male now in his 9th month of treatment for MDR-TB (7 months post culture conversion). On admission he was sputum smear-positive with bilateral cavities on chest X-ray. His cough and fever present on admission have resolved. He has diabetes (on oral anti-hyperglycemic agents) and is HIV-negative.

He was discharged back to his home community and has arrived at the district clinic for his regular visit with the DTLC and DOT nurse. The patient reports numbness and tingling in his fingers and toes, a problem that started approximately three weeks ago and seems to be getting worse. His weight today is 86kg (an increase of 10kg since MDR-TB diagnosis).

Current Medications: PZA 1750mg daily; Ofx 400mg twice per day; Eta 750mg daily; Cs 500mg daily; B6 100mg daily; Daonil 10mg 12hrly and metformin 500mg at noon and after dinner.

Radiology:

- Chest radiograph at 6 months into treatment shows persistent bilateral cavities, but improving and diminished in size since initial presentation.

Lab:

- **DST results: Resistant**- isoniazid, rifampicin, ethambutol, streptomycin
- Sputum smear remains negative
- Current values: WBC 9.7; Hgb 17; platelet count 174; AST 32; ALT 37; total bilirubin 1.0; **fasting glucose 6.5 H**; TSH 2.99

Issue(s):

Recommendations

Person responsible

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Case 2

History: 20 year-old man currently in his eighth month of treatment for MDR-TB (seven months past culture conversion). He reports increased difficulty concentrating, difficulty sleeping, loss of interest in his activities, and loss of appetite. He feels he can no longer continue taking his medications. He is HIV positive and has been on ART for 12 months. DOTS-plus nurse says that he takes treatment regularly and never misses doses.

Current Medications: PZA 1250mg daily; Ofx 400mg twice per day; Eta 250mg AM / 500mg PM; Cs 500mg daily; B6 100mg daily; Combivir, Efavirenz, and cotrimoxazole daily.

Lab:

- **DST results:** Resistant- isoniazid, rifampicin, ethambutol, streptomycin
- CD4 count = 285
- WBC 9.7; Hgb 17; platelet count 174; potassium 3.7; **AST 83 H; ALT 70 H**; total bilirubin 1.0; creatinine 1.2; TSH = 2.99

Other information:

- Two brothers died of TB
- Unable to finish school for economic reasons

Issue(s):

Recommendations

Person responsible

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Case 3

History & CC: 26 year-old woman currently in the 10th month of MDR-TB treatment. She is brought to the clinic because of weakness in her legs, fatigue, and feeling cold. She could barely walk 2 blocks to the clinic because of weakness.

Other symptoms: Nausea worse after evening dose

Other information:

- Lives alone; husband died recently of unknown cause
- She says she is not sexually active
- She has refused to have an HIV test many times
- Weight is 67 kg

Medications: PZA; Ofx; Eta; Cs; B6

Radiology: Chest radiograph at 6 months showed improving right upper lobe infiltrate

Lab:

- Sputum smear negative since month 3, culture negative since month 3.
- **DST results:** Resistant- isoniazid, rifampicin, ethambutol, streptomycin
- TSH 6.7 (0.2-5); creatinine 0.6 (0.6-1.2); potassium 3.7 (3.5-5)
- Unable to finish school for economic reasons

Issue(s):

Recommendations

Person responsible