

Case Book

Management of Drug-resistant Tuberculosis and DOTS-Plus

2007

**Lesotho Ministry of Health and Social Welfare
Partners In Health**



Case 1:

32 year old man referred to the TB clinic from the HIV clinic in the hospital for positive sputum smear microscopy.

Past medical history: diagnosed with HIV one year ago

Other symptoms

- Dry cough
- Fever and fatigue for 2 weeks
- No weight loss

Other information

- Unmarried, lives with mother and sister's family. Only mother knows he is HIV positive
- Has been taking CTX regularly
- No previous TB diagnosis or treatment

Medications: cotrimoxazole prophylaxis

Physical Exam

- Weak, febrile
- Coarse breath sounds
- Shotty cervical adenopathy

Labs:

- Sputum smear positive
- No recent CD4 test

Case 2:

25 year old male here for 2-month follow-up visit after finishing intensive phase. He was told he had HIV when he was diagnosed with TB. He has been gaining weight and has had no problems with his TB treatment.

Other symptoms: None

Medications: isoniazid-rifampin FDC

Other information: no regular sexual partner, sporadically sexually active

Physical Exam: 5 kg weight gain since starting TB treatment

Case 3:

28 year old woman with cough for 3 months, occasional greenish and bloody sputum. Last week you asked her to leave 3 sputum samples at the lab. She is back for results.

Past medical history: She has never been treated for TB.

Other symptoms:

- Pain when coughing
- Sputum is greenish and sometimes bloody.
- Weak, tired
- Diarrhea
- Losing weight for 8 months
- Fever for 1 month

Medications: None

Other information:

- Delivered last baby 10 m ago – she died in infancy; no menses since then
- Live with in-laws, 2 children, husband lives in the city

Physical Exam

- Very wasted
- Oral thrush
- Non-tender, enlarged lymph nodes in neck, armpits
- Decreased breath sounds LLL
- Herpes Zoster scars R chest

Lab

- Rapid HIV test positive
- Sputum smear positive

Case 4:

40 year old woman with a cough for one month. She was diagnosed with TB last year and finished Category 1 six months ago. She was diagnosed with HIV when she was originally diagnosed with TB, but she is not followed regularly in the HIV/ART clinic.

Other symptoms:

- Cough is getting worse, now with brownish sputum.
- She thinks she may have fevers sometimes, but does not have a thermometer.
- Weight is back down to weight to what it was before TB treatment.

Other information: She sometimes forgot to take TB medicine, because of work.

Physical Exam: Thin, weak

Lab: sputum smear positive

Case 5:

18 year old woman who has just been released from the hospital. She came to the hospital with nausea, vomiting and a headache and was told she had TB infection of her brain.

Other symptoms:

- Feeling much better than before, but still weak.
- No cough or fevers.

Other information:

- She had never been tested or treated for TB before.
- She was diagnosed with HIV while she was in the hospital
- She lives with her spouse, your in-laws, and 2 children.

Medications:

- Cotrimoxazole daily
- Isoniazid-rifampin-ethambutol-pyrazinamide FDC

Case 6:

32 year old man diagnosed with smear-positive TB, currently in the 3rd month of treatment with Category 1. He was diagnosed with HIV at the same time the TB was diagnosed.

Other symptoms:

- Felt better during the first month, but has continued to have a dry cough.
- Night sweats
- Weight has been stable since starting treatment
- No diarrhea

Other information:

- He has never been tested or treated for TB before.
- He claims to take his medicine every day.

Medications:

- Cotrimoxazole daily
- Isoniazid-rifampin FDC

Lab: sputum smear negative in month 2

Case 7:

40 year old nurse who works in a health centre near the hospital. She had a dry cough for several months, and treated herself with antibiotics several times. Finally, she asked the doctor at the district hospital to look at her chest x-ray.

Other symptoms:

- She has an occasional sharp pain on her right side, especially when she coughs.
- She has been having night sweats for several weeks.

Other information:

- She mainly works in the antenatal clinic.
- She lives with her husband and two children.

Lab:

- Chest x-ray with cavitory lesions in the right upper lobe.
- Sputum smear negative x 3

Medications: none

Case 8:

19 year old woman who has just finished Category 1 treatment. She says she feels fine except for a dry cough. You send her to the lab for sputum smear.

Other symptoms: occasional sweats at night

Medications: none

Other information:

- She says that she took her TB drugs regularly. She did not have a treatment supporter.
- She has never had an HIV test. You told her to be tested for HIV several months ago, but she never went.
- She lives with her mother and one 2 year old son.

Physical exam: unremarkable

Lab: Sputum smear positive

Case 9:

One of your MDR-TB patients brings in her husband, who has been coughing for several weeks. She is in the 10th month of treatment and has been sputum smear and culture negative since the 2nd month. They are both HIV-positive and on ART for months.

Other symptoms:

- Cough with green sputum
- Night sweats
- Weight loss

Other information:

- He has never been tested or treated for TB before.
- He claims to take his ART every day.

Medications:

- Cotrimoxazole daily.
- D4T-3TC-NVP twice daily.

Lab:

- Sputum smear positive.
- CD4 before starting ART was 100.

Case 10:

60 year old woman who was diagnosed with TB for the first time five months ago. She was started on Category 1 and has been very adherent to her therapy, according to the community health worker. She has been tested twice for HIV in the past and was negative both times. She continues to have a productive cough, but has not really changed much during the past five months.

Other symptoms: "Feels fine"

Physical exam:

- Thin

Medications:

- Isoniazid-rifampin FDC

Lab:

- Sputum smear positive x 2.

Case 11:

44 year old man who was admitted last night to the medical ward. He is currently in the 4th month of treatment with Category 2. His chart says that he was diagnosed with TB 2 years ago and did well on treatment, but relapsed 4 months ago and was placed on Category 2. Several sputum samples have been sent for culture and DST, but no results have come back yet. He was admitted for difficult breathing—the admission orders say to continue Category 2 at the moment.

Physical exam:

- Very wasted
- Unable to walk
- Unable to talk very well
- Seems a little confused

Other information:

- He used to work in South Africa, but not anymore.
- He lives with his wife and three children.
- He is HIV-positive, but it is not clear when he was diagnosed. (He is not able to explain when he was diagnosed.)

Medications: Ampicillin and gentamicin IV.

Lab:

- Chest x-ray with multiple bilateral cavities and infiltrates
- CD4 one year ago 150
- Sputum smear positive on admission
- No DST results available

Case 12:

22 year old woman currently in the 4th month of treatment with Category 2. She says she is a little better than when she started, but still has a dry cough.

Past TB history:

- Diagnosed with smear-negative pulmonary TB in last year. She improved clinically on Category 1, with outcome "completed" given.
- Started having symptoms several months later and was started on Category 2 treatment. Sputum smear was negative at the beginning of treatment. Culture was not sent.
- Her treatment supporter is her husband; the doctor thinks she has been taking treatment regularly.

Physical exam: Weight 45 kg (same as when she started Category 2)

Other information:

- HIV-positive; diagnosed at beginning of Category 2

Lab:

- Sputum smear positive in month 3 and 4.

Medications: None

Case 13:

30 year old man currently in the second month of Category 2. He says he feels better but continues to have a dry cough. He was diagnosed with HIV last year when he was diagnosed with TB.

Past TB history:

- Category 1 treatment was extended because of smear-positive sputum. The patient was very irregular in treatment, with several weeks on and off, despite having a treatment supporter.
- The doctor then decided to hospitalize the patient for Category 2 with strict DOT. The patient was discharged after one month, and the patient has been more regular in treatment, according to treatment supporter.

Other information: Lives alone in Maseru.

Physical exam: Weight 60 kg (improved 2 kg from the beginning of Category 2). Otherwise normal.

Medications:

- Cotrimoxazole 960 mg daily
- Isoniazid-rifampin FDC

Lab:

- Sputum smear negative x 2
- CD4 260
- DST results:
Resistant: H, R, E
Sensitive: S

Case 14:

38 year old man who is the husband of a patient with documented MDR-TB. He has never had TB before. He's coming along with his wife (at her regular clinic appointment) because he has had cough and night sweats on and off for several weeks.

Physical exam: Weight 70 kg

Other information:

- Lives with wife and 3 children (2, 4, 7)
- His wife is currently in the 10th month of a individualized regimen: Z-Km-Ofx-Eto-Cs, is smear/culture negative and is clinically much improved.

Lab:

- Sputum smear positive
- Rapid HIV test positive

Medications: None

Case 15:

37 year old man with cough, night sweats, and sputum smear positive. 4 years ago he was diagnosed and treated for TB at your clinic, but he defaulted after 1 month. He says that later he was diagnosed with TB again in South Africa and was started on a regimen with kanamycin, ethionamide and ciprofloxacin, but he didn't take the ethionamide because it made him vomit. He was diagnosed with HIV in South Africa as well.

Other symptoms:

- Has lost about 10 kg over the past year.
- Chronic diarrhea

Other information:

- He used to work in South Africa, but not anymore.
- He lives with his wife and three children.

Medications: None

Physical examination:

- Thin
- Weight 52 kg
- Respiratory rate 24
- Oral hairy leukoplakia; otherwise unremarkable

Lab:

- Rapid HIV test positive
- Sputum smear positive
- CD4 pending

Case 16:

28 year-old male in treatment for MDR-TB for 8 months. He was very weak at the time of treatment initiation but has now improved. He is HIV-negative. He first noticed burning in the soles of his feet one month ago. The symptoms have worsened and soon involve his lower extremities up to the knee. He is unable to walk well.

Past medical history:

Medications: Km-Ofx-Eto-Cs-PAS.

Other information: lives with mother, wife and two children

Physical examination: Weight 60 kg

Lab:

- Chest radiograph shows persistent bilateral cavities
- Sputum smear negative since month 3
- DST results
 - Resistant: H, R, E, Z, S
 - Sensitive: Km, Cm, Ofx, Eto, Cs, PAS

Case 17:

39 year-old woman in her second week of MDR-TB treatment. Her doses have been observed by a village health worker, who confirms that she has been having severe nausea and vomiting, worse in the morning than evening.

The patient is very anxious about taking so much medication. She is nauseated in the morning when she awakes.

Past medical history:

- Failure of Category 1 treatment (smear positive in month 5)
- History of disseminated herpes zoster
- HIV positive for 3 years

Other information:

- "Why do I have to take so many pills?"
- Lives alone

Physical examination: weight 48 kg

Medications:

- Z-Km-Ofx-Eto-Cs-PAS
- pyridoxine

Labs:

- DST pending
- CD4 110 (several months ago)

Case 18:

20 year old man currently in second month of treatment for MDR-TB. He has difficulty concentrating, difficulty sleeping, loss of interest in his activities, and loss of appetite. He feels he can no longer continue taking his medications or eating and has lost 5 kg. He is HIV positive and has been on ART for 6 months.

Past medical history: Failed treatment with Category 1 two years ago

Other information:

- Two brothers died of TB.
- Unable to finish school for economic reasons.
- Community health worker says that he takes treatment very regularly, and never misses doses

Physical exam: Weight 54 Kg

Medications:

- Standardized Category 4 regimen
- AZT-3TC-EFV

Lab: Sputum smear positive

Case 19:

26 year old woman currently in the 5th month of MDR-TB treatment. She is brought to the clinic by her village health worker because of weakness in her legs. She could barely walk 2 blocks to the clinic because of weakness.

Other symptoms:

- Nausea worse after evening dose
- Numbness in his face, hands and feet.

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

Physical examination: weight 67 kg

Medications: Cm-Ofx-Cs-Eto-PAS
Pyridoxine

Labs:

TSH	6.7	(0.2-5)
Creatinine	0.6	(0.6-1.2)
Potassium	2.7	(3.5-5)

Case 20:

30 year old woman currently in fifth month of MDR-TB treatment. She complains that she has had 2 weeks of fevers, night sweats, and a cough with green sputum.

Other symptoms: Nausea after morning and evening doses—takes metoclopramide.

Past medical history:

- Failure of Category 1 (6 months) and Category 2 (8 months)
- HIV positive: Started on ART 2 months ago
- After two weeks of taking d4T-3TC-NVP, developed abdominal pain and a rash, and was switched to d4T-3TC-EFV

Other information:

- Lives with 7 year old son and elderly mother
- Son is HIV-negative

Physical examination:

- Thin, otherwise comfortable
- Weight 52 kg

Medications:

- d4T-3TC-EFV
- Cm-Ofx-Eto-Cs-PAS
- Pyridoxine
- CTX

Lab:

- Sputum smear positive
- Chest radiograph with worsening bilateral cavities and infiltrates
- DST results:
Resistant: H, R, E, Z, S, Km
Sensitive: Cm, Ofx, Eto, Cs, PAS

Case 21:

35 year old patient currently in 3rd month of MDR-TB treatment. Yesterday, he looked in the mirror and noticed that his eyes were yellow.

Past medical history:

- Failure of Category 1 (smear positive)
- HIV positive; on ART for 6 months

Other symptoms:

Nausea since starting MDR-TB treatment.

Medications:

- Standardized Category 4 regimen
- AZT-3TC-EFV
- Cotrimoxazole prophylaxis
- metoclopramide

Physical examination:

- Liver margin tender to palpation
- Weight 70 kg

Labs:

- Sputum smear negative
- DST pending

Case 22:

22 year-old male who started MDR-TB treatment 8 months ago. For the last month he has had difficulty hearing and noted a buzzing in his ears.

Past medical history:

- HIV negative at start of treatment.

Medications:

- Cm-Mfx-Cs-PAS

Labs:

- Smear negative for 5 months. 3rd month culture was positive and
- Chest x-ray shows extensive parenchymal damage with bilateral cavities—unchanged.
- DST results:
Resistant: H, R, E, Z, S, Km, Ofx, Eto
Sensitive: Cm, Cs, PAS