

Difficult to Treat DRTB Cases: A Case Series

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Abstract

Tuberculosis (TB) is one of the 10 leading causes of death worldwide. Although the global incidence of TB has been slowly declining, TB remains out of control in many parts of the world. Some of the early gains made in several parts of the world, including in Africa and Asia, are now being threatened by the emergence of drug-resistant TB [DR-TB]. As per the Global TB Report 2018, in 2017, there were approximately 558,000 estimated new cases of MDR-TB/ rifampicin resistant-TB (RR-TB) globally [3]. More than half the MDR-TB burden lies in India, China and Russia.

Keywords: Drug resistance, CBNAAT, ATT, Drug regime.

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Aims and Objectives:

To evaluate the history, clinical features and radiological profile of DRTB cases and prepare an appropriate drug regimen for them. [1,2]

Materials and Methods:

Patients with DRTB, Digital Chest Xray, Sputum/Any other body fluids [AFB, CBNAAT/TRUNAAT, 1st line LPA, 2nd line LPA, LCDST], FNAC (where indicated) [3,4]

Cases & Results:**Case No 1****History and Physical Findings**

- 50 Years old male
- Dry Cough and Breathlessness since 1 month
- No h/o previous ATT intake
- Has household contact with MDR TB Case (Brother)

Radiological FINDINGS

- Patchy opacities with Fibrotic strands in Right upper zone

Investigations

Sputum: AFB: 1+CBNAAT: MTB detected (Rif. Resistance Detected)

FLLPA: Levofloxacin Resistance detected (High dose Moxifloxacin sensitivity as MUT 3B, 3C, 3D)

Drug Regime Given

Bedaquiline-Delamanid based AOL regime {18-20} High dose Moxifloxacin, Delamanid, Bedaquiline (6 months or longer), Linezolid, Clofazimine, Cycloserine started.

Case No 2**History and Physical Findings**

- 3.5 Years Female child
- Low grade fever and Cough with expectoration since 1 month
- No h/o previous ATT intake

Radiological Findings

- Consolidation, Cavitory lesion in left upper and mid zone.

Investigations

SPUTUM: AFB Negative

CBNAAT: MTB detected (Rifampicin Resistance Detected)

Drug Regime Given

Modified (Injectable) Amikacin based short course regimen.

Injectable Amikacin 180mg- 0.75 mL in alternate days, Levofloxacin 180 mg, Eto 180 mg, Clofazimine 50 mg, High dose Isoniazid 150 mg, Pyrazinamide 250mg, Ethambutol 250mg

Case No 3

History and Physical Findings

- 25-year-old Male.
- Multiple cervical swellings since 1 month and cough with expectoration since 5 days.
- Patient taking CAT 1 ATT for TB Adenitis since last 7 months.

Radiological Findings

- Tree in bud with GGO on right middle lobe with small cavity on left hilum.

Investigations

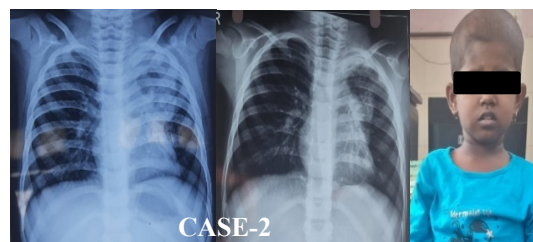
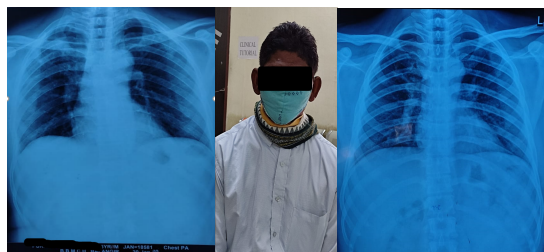
Fnac of Neck Swelling (LNS): Necrotizing Granulomatous lesion

CBNAAT of Lymph Node Aspirate: Negative

Sputum AFB: Scanty Positive

CBNAAT: MTB detected (Rifampicin Resistance Detected) in one lab and MTB detected (Rifampicin Resistance not detected) in another lab.

Drug Regime Given: AOS Bedaquiline regime.



Conclusion

DRTB deserves public health prioritisation. DR-TB requires meticulous investigation to diagnosis that is time taking and associated with considerable pulmonary morbidity. Sometimes the conventional regimes are not adequate to control the disease and regimes may be modified by physicians depending upon the situation. Substantial global reduction in TB mortality will not be achievable unless the problem of DR-TB is addressed. So, physicians must be careful in diagnosis, management and monitoring of DRTB patients.

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