

Tuberculosis Guidelines



Taj Prabhugaunker,
3rd Year MBBS ,
Goa medical college

Tuberculosis (TB) is one of the most raging maladies amongst asian contries and south africa. India being, the prime hotspot of TB, it is of paramount importance that we identify TB suspects and diagnose them early, to effectively treat and make them non-infectious.

TB is an infectious disease and spreads mainly by airborne droplet nuclei. Sputum positive pulmonary TB patients are the main source of infection; hence it is important to understand the following guidelines to efficiently handle the case.

Guidelines for diagnosis of pulmonary TB:

Most patients with TB visit health facilities promptly after the symptoms occur. Hence every adult patient with respiratory symptoms must be evaluated for symptoms suggestive of TB, such as:

- 1) Persistent cough for 3 weeks or more, usually with expectoration.

- 2) Fever with evening rise in temperature.
- 3) Blood in sputum
- 4) Loss of appetite
- 5) Sudden weight loss
- 6) Tiredness and lethargy
- 7) Night sweats

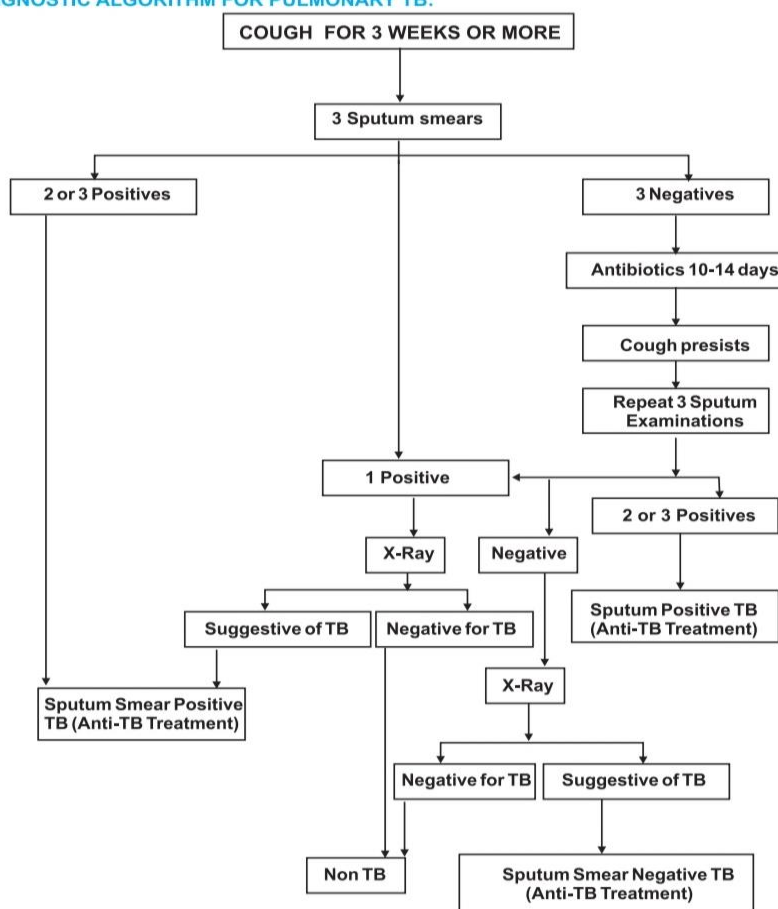
- 8) Chest pain and shortness of breath

Case finding and monitoring tools:

- 1) Sputum smear microscopy
- 2) Chest X-ray
- 3) Culture of Mycobacterium tuberculosis bacilli
- 4) Tuberculin Test

Diagnostic Algorithm for Pulmonary TB:

DIAGNOSTIC ALGORITHM FOR PULMONARY TB:



CBNAAT:

CBNAAT provides a robust and a promising role in early diagnosis of

TB in head and neck as well as in other cases of smear negative TB such as TB-HIV and MDR TB. Its high specificity and less time taking

procedure make it an excellent tool for timely diagnosis of such cases.

Necessary Steps in diagnosis:

- 1) Promotion of awareness in the community, among medical professionals and all medical staff regarding symptomatology of TB.
- 2) Examination of household contacts of smear positive TB patients irrespective of the duration of cough.
- 3) Examination of extra pulmonary TB cases with cough of any duration.
- 4) In a TB suspect, at least 3 sputum specimen samples are to be collected over two consecutive days. One at the first visit, second at home in the next early morning and third, on the second visit to the laboratory on that day.
- 5) Before collecting the sputum specimen, the patient must be explained the need for the above procedure, under the guidance of a health worker.
- 6) Sputum specimen should be examined on the same day. In cases where it needs to be transported to a DMC, it can be

examined within one week and should be stored in a cool place.

- 7) The specimen should be examined by Ziehl-Neelsen method as a rule (minimum 100 oil immersion fields) and interpreted as per the standard method.
- 8) Effective Quality assurance (QA) of the RNTCP sputum smear microscopy network is crucial.

Guidelines for Treatment of pulmonary TB:

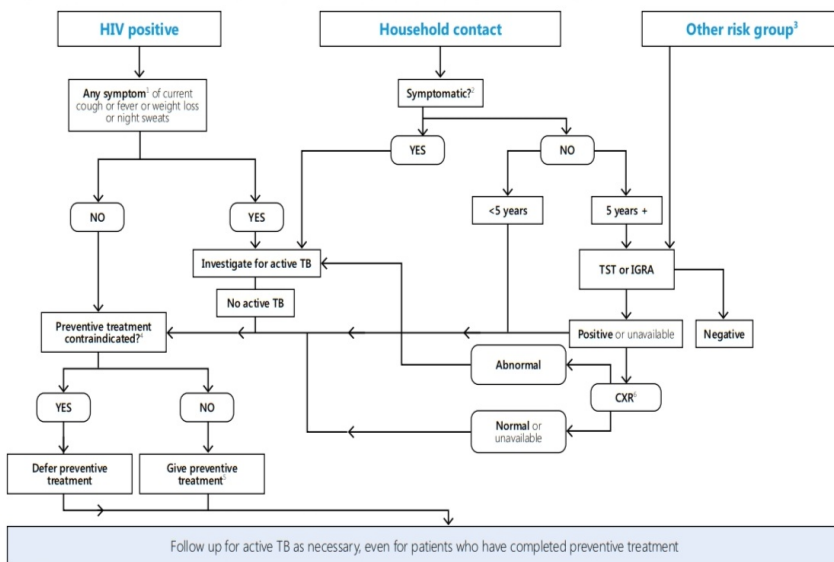
Once the patient has been diagnosed with TB, the medical officer is responsible, for deciding the treatment from under the 3 categories of RNTCP programme, depending upon the following criteria:

- 1) Sputum smear results
- 2) The history of previous anti TB treatment
- 3) Disease classification (pulmonary or extra pulmonary)
- 4) Severity of disease

In RNTCP, intermittent (Thrice weekly) treatment regimens are given under direct observation for both pulmonary and extra pulmonary tuberculosis patients.

RNTCP provides standardised anti TB treatment given under 3 categories.

Category of Treatment	Type of Patient	Regimen*
Category I	New sputum smear- positive Seriously ill** new sputum smear - negative Seriously ill** new extra - pulmonary	2H ₃ R ₃ Z ₃ E ₃ +4H ₃ R ₃
Category II	Sputum smear - positive Relapse Sputum smear- positive Failure Sputum smear - positive Treatment After Default Others***	2H ₃ R ₃ Z ₃ E ₃ S ₃ + 1H ₃ R ₃ Z ₃ E ₃ + 5H ₃ R ₃ E ₃
Category III	New Sputum smear - negative, not seriously ill	2H ₃ R ₃ Z ₃ +4H ₃ R ₃



Directly Observed Treatment (DOTS)

GUIDELINES:

- 1) An observer watches and supports the patient in taking their drugs. Direct observation ensures treatment for the entire

course with the right drugs at right doses

- 2) It involves 2 phases. The intensive phase and the continuation phase.
- 3) The DOT provider should be acceptable and approachable to the patient and is accountable to the health system.
- 4) The DOT centre is the place where DOT is administered and is convenient for both the patient and the provider.

- 5) Patient who has missed a dose should be contacted and put back on anti TB therapy, through home visits.

These guidelines aim to fulfil the following objectives, under RNTCP.

- 1) To decrease morbidity and mortality by ensuring cure, minimizing relapse and preventing development of drug resistance
- 2) To decrease infection and break the chain of transmission of the infection.