WHO STARTS TB TREATMENT?
- Patients who have bacteriological confirmation of smear-positive, AFB smear or TB culture
- Patients with clinical signs and symptoms suggestive of TB (coughing, weight loss, night sweats and/or fever) and radiological evidence with/without bacteriological confirmation.

STANDARD TREATMENT OF NEW AND PREVIOUSLY TREATED TB FOR ADULTS AND CHILDREN > 8 YEARS AND < 30 KG

Pre-treatment body weight

<table>
<thead>
<tr>
<th>Weight (kg)</th>
<th>Treatment Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-59 kg</td>
<td>3-4 tabs/week</td>
</tr>
<tr>
<td>30-50 kg</td>
<td>2 tabs/week</td>
</tr>
<tr>
<td>&lt;30 kg</td>
<td>1 tab/week</td>
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</tbody>
</table>

TREATMENT OF EXTRA-PULMONARY TB

- Six months treatment.
- In severe forms of TB or complicated disease (meningitis, TB bone/joints, miliary TB), treatment may be extended to 9 months (2 months intensive phase (I), 7 months continuation phase (RHI)).
- Steroids are recommended in TB meningitis and TB pericarditis - high dose steroid treatment with prednisolone 1.25mg/kg daily for 4 weeks and then taper off gradually over 2 weeks.

Add the following tests if the patient meets the criteria:
- All patients:
  - TB symptoms (refer to doctor if symptoms warrant)
  - Weight (Adjust dosing accordingly. If patient is losing weight, refer to doctor)
  - Trace contacts and screen for TB disease. Also assess eligibility for isoniazid preventive therapy in children under 5 years and HIV-infected individuals
  - Discuss family planning methods
  - Assess adherence by conducting pill counts, and review patient treatment cards
  - Assess side-effects
  - Test for HIV status if unknown
  - Manage co-morbidities including HIV
  - Follow-up on test results ( smear microscopy, culture, line probe assay (LPA) or drug susceptibility testing (DST), if done).

BACTERIOLOGICAL MONITORING OF PATIENTS ON TB TREATMENT

- New smear positive PTB
- OR GeneXpert posi (R sensitive)
- OR culture positive (R sensitive)

At 7 weeks:
- Take one sputum smear

Conduct smear microscopy:
- At week 7
- At week 13

Negative

Positive

NEW START TREATMENT TAKING DNA BIOCHEMISTRY OVER 7 WEEKS

1. Register patient as “drug susceptible” and the resistance panel provided.
2. Cryptocurrency: continue phase of treatment with daily E/I until the end of the 9-week intensive phase.

New smear positive PTB

Register patient as “negative” E/I and counsel patient about the importance of treatment compliance.

Negative and drug susceptible

Drug susceptibility: re-start TB treatment, counsel the patient and provide treatment support.

Positive and Rif resistant or MDR TB

Stop treatment when 6 months treatment is completed. Conduct DST and E/I for PZA and EM.

Negative and INH resistant

Continue intensive phase for 1 month and add ethambutol.

Repeat smear at 13 weeks

Check culture and DST results

Repeat smear

Drug Susceptible: re-start TB treatment, counsel the patient and provide treatment support.

Drug Resistant: refer to MDR-TB unit.

Co-morbidity

- Diagnostics
- Management

Chronic liver disease

Baseline liver function tests (LFT) on admission.
- If normal, no further liver function monitoring is required. TB treatment should be started.
- If LFTs are elevated but less than 2X the upper normal range, start TB treatment, monitor ALT monthly and assess the patient monthly for symptoms
- If LFTs are elevated by more than 2X the upper normal range of TB, treatment should not be started. Refer for further investigation and management.

Acute hepatitis

Seek expert advice or phone the HIV & TB Hotline.

Renal impairment

Ethambutol is renally excreted. Give standard doses but prolong dosing intervals (GFR 10-50 ml/min; every 24-36 hours, GFR <10 ml/min; every 48 hours).

Pregnancy

- Standard TB treatment is recommended. Do not exceed maximum doses.

Add the following tests if the patient meets the criteria:
- Pregnancy test (women of child-bearing age, presenting with a history of amenorrhoea and not on contraception)
- HIV status (if unknown or not tested in the past year)

BLOOD GLUCOSE (SYMPTOMATIC PATIENTS)
- Take sputum smear

MANAGEMENT OF COMMON ADVERSE DRUG REACTIONS TO TB DRUGS

Side effects

- Drug(s) responsible

Management

- Anorexia, nausea, abdominal pain

Rifampicin

Exclude drug-induced liver injury and hepatitis and other causes of gastrointestinal intolerance e.g. alcohol, non-steroidal anti-inflammatory drugs (NSAIDs), gastro-esophageal reflux, pancreatitis.

Take rifampicin just before or after a meal or with a light snack or at bedtime.

- Joint pains

Pyrithione

Continue TB drugs.

Treat symptomatically with NSAIDs.

- Gastrointestinal symptoms

Pyrithione, isoniazid, rifampicin

- Controle of itchy rash

Pyrithione, isoniazid, pyrazinamide

- Hair loss

Pyrithione

Check platelet count. If platelet count below normal range, stop rifampicin.

- Rashiness

Pyrithione

Stop and rechallenge TB drugs once the rash resolves should be done in hospital by an expert.

- Other causes

Exclude other causes.

- Skin itching, rash

Stop and rechallenge TB drugs in hospital.

- Tuberculosis meningitis

Stop rifampicin and refer.

- Oral ulcer

Stop rifampicin.

- Thrombocytopenia/purpura

Rifampicin

Stop rifampicin and refer.

MANAGEMENT OF TREATMENT INTERRUPTIONS

When a patient returns to continue treatment every effort should be made to encourage the patient to continue. When all reasons fail and patient insists on stopping treatment, the patient should sign a refusal of hospital treatment.

DURATION OF INTERUPTION

Less than 1 month
- Continue treatment as usual

1-3 months
- Continue treatment and add the missed doses at the end of the treatment phase

3 months or more (Lost to follow-up)
- Continue treatment and add the missed doses at the end of the treatment phase

TERATOGENIC TREATMENT OF TB IN HIV CO-INFECTIONS

- All patients:
  - Macrophage (ARA)
  - Body mass index
  - Urine glucose and ketones
  - Alcohol use screening

Adverse effects

- Dependent on severity of the skin rash:
  - Mild, itching rash, with no blistering, mucosal involvement or systemic involvement - give antihistamine
  - Pustular rash - usually rifampicin.

HYPERSENSITIVITY PATIENTS

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