



# Standard Treatment Workflow (STW) for the Management of ADULT PLEURAL TUBERCULOSIS ICD-10-A15.6

## WHEN TO SUSPECT?



### HISTORY

- Fever
- Pleuritic chest pain
- Cough
- Breathlessness
- Anorexia
- Weight loss
- History of TB contact

### EXAMINATION

- Dullness to percussion
- Decreased/absent breath sound

## INVESTIGATIONS

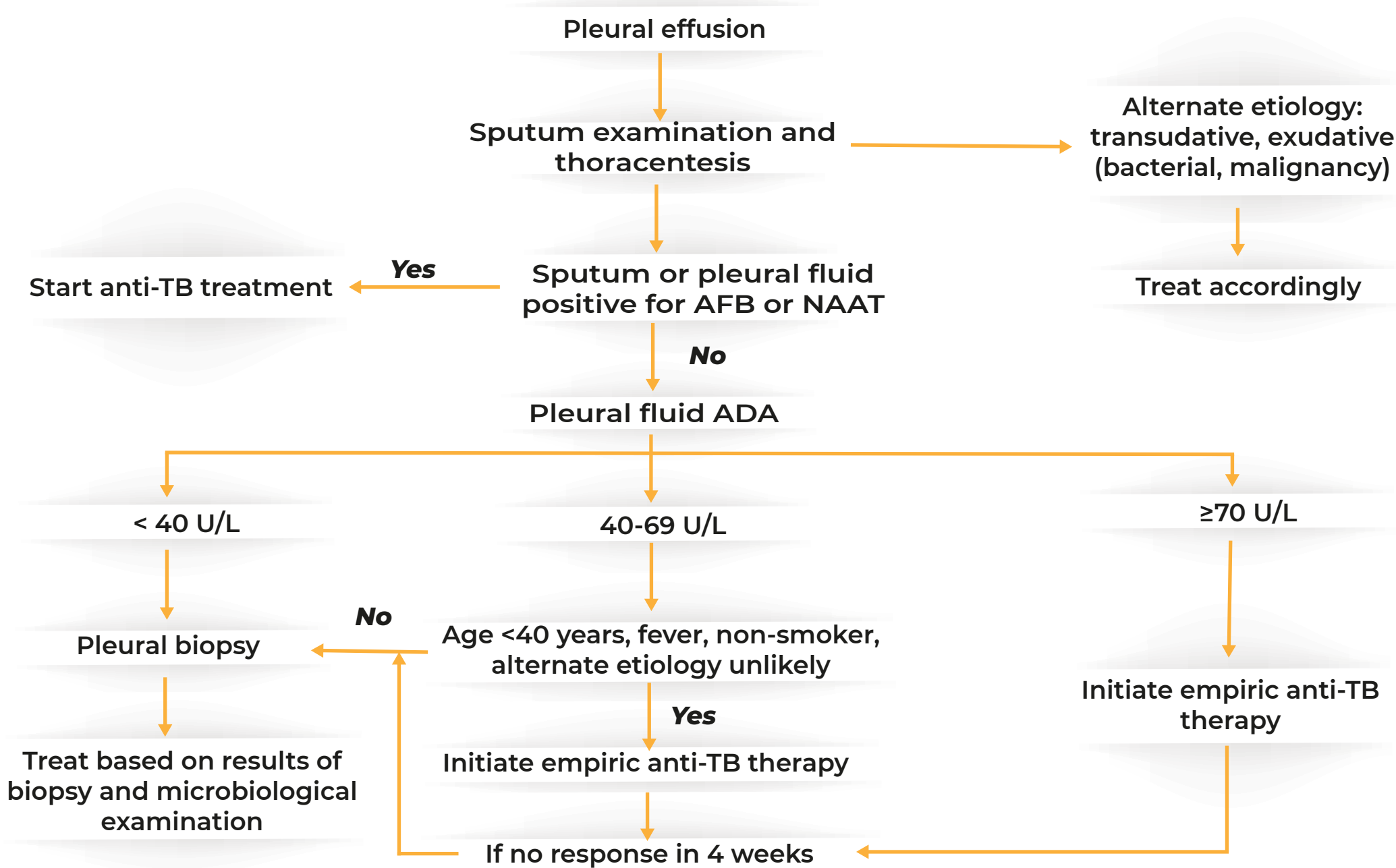
### ESSENTIAL

- CXR (to confirm pleural effusion)
- Sputum for AFB/NAAT
- Refer immediately for pleural tap
- Thoracentesis (ultrasound-assisted)
- Pleural fluid analysis :
  - › Cell count (total and differential)
  - › Protein
  - › Glucose
  - › Gram stain
  - › Bacterial cultures
  - › Stain for acid-fast bacilli
  - › Adenosine deaminase (ADA)
  - › NAAT
  - › Cytology evaluation

### DESIRABLE

- CT chest (before pleural biopsy)
- Pleural biopsy (image-guided/thoracoscopic) (If diagnosis is uncertain)
- Histopathology
- MGIT

## DIAGNOSTIC



## MANAGEMENT

### TREATMENT AND RESPONSE

- As per NTEP
- Therapeutic pleural tap can be done under ultrasound assistance if the effusion is large, and the patient is breathless

### WHEN TO REFER?

- Facility for ultrasound assistance is not available
- Diagnosis is not established after thoracentesis and facilities for pleural biopsy is not available
- Drug-resistant TB is detected: according to NTEP
- Worsening pleural effusion on follow up

### FOLLOW UP

- Most patients who respond to treatment will have improvement in their general condition by 2 weeks, and significant improvement in pleural effusion by 4-8 weeks
- Disappearance of constitutional symptoms with decrease in pleural effusion suggests responsiveness to treatment
- Increase in pleural effusion can suggest
  - › Paradoxical reaction or
  - › Drug-resistant TB or
  - › Alternative etiology
- A follow up CXR at 4-8 weeks after starting ATT is useful to assess progress

## ABBREVIATIONS

**ADA:** Adenosine Deaminase  
**AFB:** Acid-fast Bacilli  
**ATT:** Anti Tubercular Treatment

**CT:** Computed Tomography  
**CXR:** Chest Radiograph  
**MGIT:** Mycobacterial Growth Indicator Tube

**NAAT:** Nucleic Acid Amplification Test  
**NTEP:** National Tuberculosis Elimination Programme  
**TB:** Tuberculosis

## REFERENCES

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