



Standard Treatment Workflow (STW) for the Management of PAEDIATRIC LYMPH NODE TUBERCULOSIS ICD-10-A18.2

WHEN TO SUSPECT?

- Persistent enlargement of lymph node for >2 weeks in one or more areas in cervical/axillary/inguinal regions
 - › Size > 2 cm or matted lymph nodes ± chronic sinus
- With/without associated systemic symptoms: fever, cough, poor appetite, weight loss
- With no evidence of recent scalp/skin lesions of draining area

TB is unlikely if: the lymphnodes are few, small (< 2 cm) and are persistent for a long time (months to years) without any systemic symptoms

INVESTIGATIONS

Essential

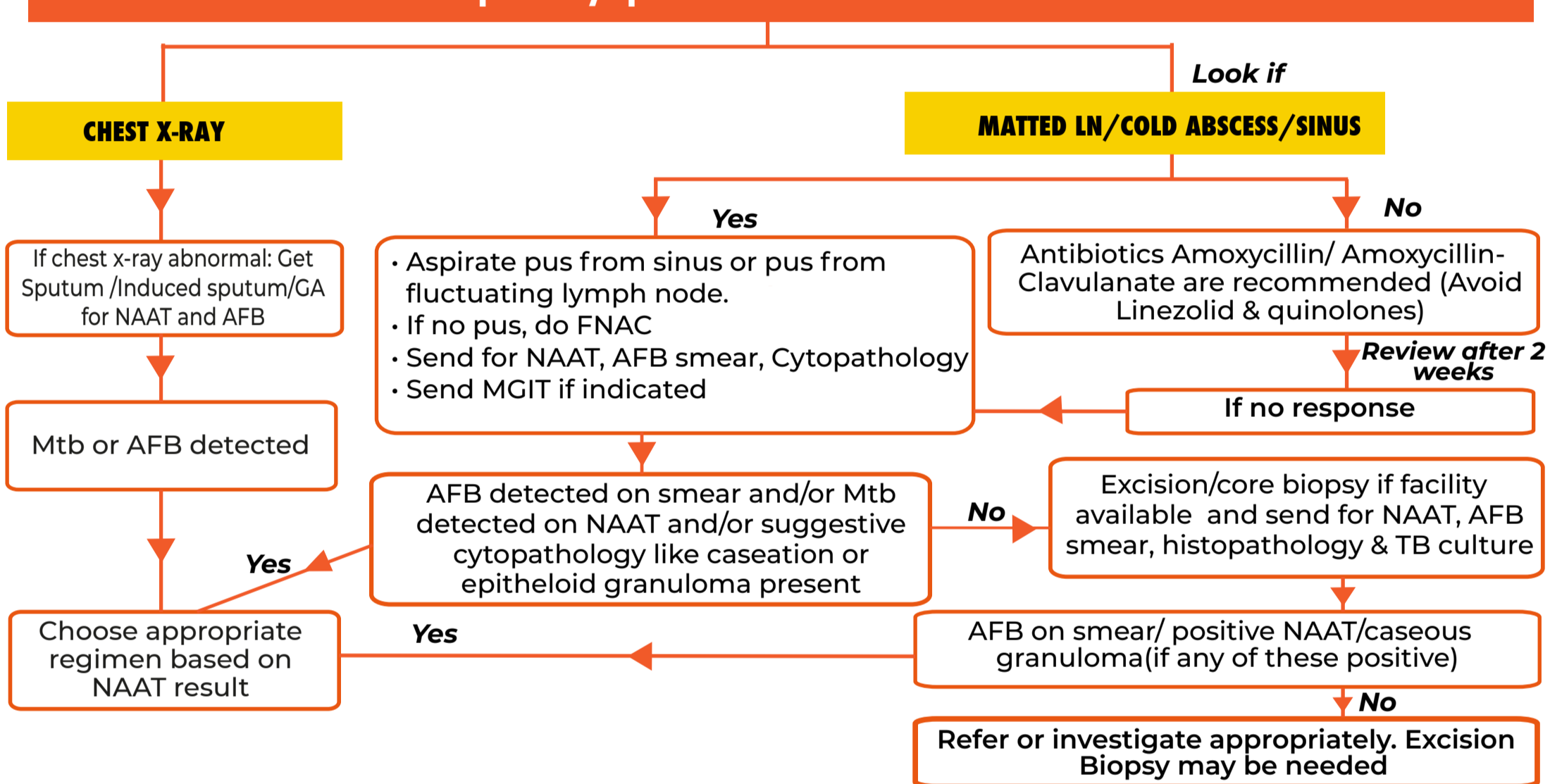
- **Lymphnode aspirate:**
 - › Send for NAAT (also MGIT culture, particularly if the patient is at risk of DRTB)
 - › Smear for AFB

Desirable

- Lymphnode cytopathology (If NAAT and smear negative)
- Lymphnode Biopsy (Core/Excision)
- Chest X-ray
- Hemogram with peripheral smear
- Cytopathology

DIAGNOSTIC

Peripheral Lymph node > 2cm in one or more sites



TREATMENT AND MANAGEMENT

TREATMENT AND RESPONSE

- Treatment should be started and follow-up should be conducted as per NTEP guidelines
- Treat with 2 HRZE + 4 HRE (standard doses) if new case & Rifampicin resistance not detected or not known
- If retreatment case or any other risk factor for DRTB, detailed & swift investigations for DRTB are advised before starting treatment
- Disappearance of constitutional symptoms with decrement or no increment in lymph node size suggests response to treatment
- Increment in lymph node size with disappearance of constitutional symptoms may suggest paradoxical reaction, provided drug resistance has been ruled out
- Increment in lymph node size without disappearance of constitutional symptoms suggests drug resistant TB/alternate cause



- Do not treat for TB based on only positive mantoux test or FNAC suggestive of reactive lymph node with negative NAAT/AFB on smear
- Children with disappearance of constitutional symptoms with no increase in lymphnode size at the end of 6 months therapy, can be kept on follow-up with no extension of therapy

WHEN TO REFER TO AN EXPERT?

- Diagnosis is not established with FNAC/NAAT
- Surgical facility is not available to do excision or core biopsy
- DR is suspected due to any reason including non-response and the facility for DRTB testing are not available
- If there is any pointer towards possible malignancy e.g. skin or mucosal bleed or significant pallor or generalised adenopathy irrespective of the size or associated hepato-splenomegaly

BCG LYMPHADENITIS

- Age is usually < 2 years
- Axillary and or supraclavicular lymphnode on the same side as BCG vaccination (usually given on the left)
- No systemic symptoms in immunocompetent children
- Treatment:
 - Wait and watch if small
 - If large and suppurative, repeated aspiration or rarely incision and drainage is required

*NAAT or AFB smear positivity can not differentiate between BCG and MTB

ABBREVIATIONS

AFB: Acid fast bacillus

BCG: Bacille Calmette Guerin vaccine

DR: Drug resistant

FNAC: Fine needle aspiration cytology

HRZE: Isoniazid; Rifampicin; Pyrazinamide; Ethambutol

MGIT: Mycobacteria Growth Indicator Tube

NAAT: Nucleic acid amplification test

NTEP: National TB Elimination Programmet

TB: Tuberculosis

REFERENCES

1. National TB Elimination Programme, Central TB Division. Training modules for programme managers & Medical officers. Ministry of Health and Family Welfare, Government of India accessed at <https://tbcindia.gov.in/index1.php?lang=1&level=1&sublinkid=5465&lid=3540> on 24 February, 2022.
2. Guidelines for programmatic management of drug resistant tuberculosis in India March 2021. National TB elimination programme, Central TB division, Ministry of Health and Family Welfare, Government of India accessed at <https://tbcindia.gov.in/showfile.php?lid=3590> on 10 February, 2022.

This STW has been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory, and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit our web portal (stw.icmr.org.in) for more information.

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