STANDARD TREATMENT WORKFLOW (STW)

Paediatric Lymph Node Tuberculosis

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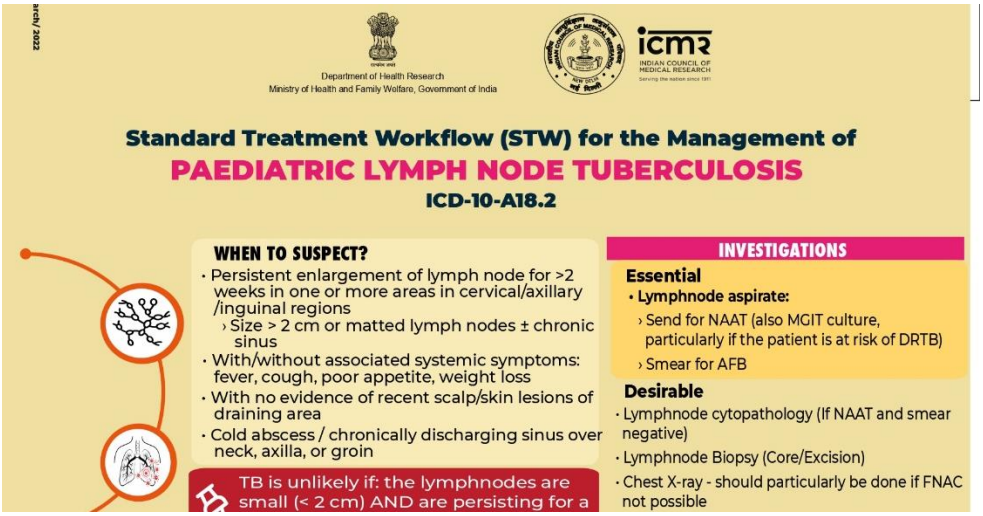

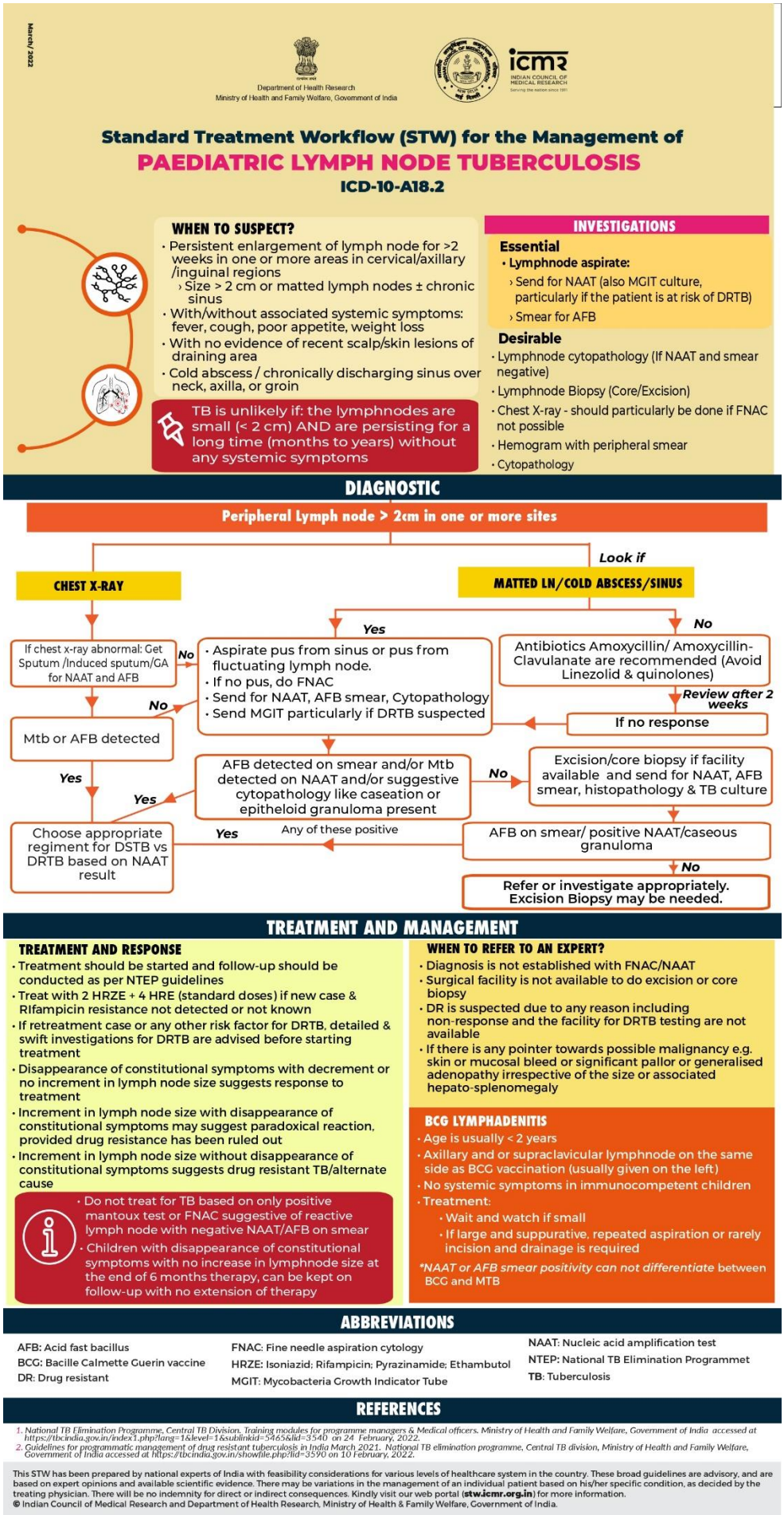
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Standard Treatment Workflow (STW) for the Management of
PAEDIATRIC LYMPH NODE TUBERCULOSIS
ICD-10-A18.2
WHEN TO SUSPECT?
• Persistent enlargement of lymph node for >2 weeks in one or more areas in cervical/axillary /inguinal regions
› Size > 2 cm or 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
• Cold abscess / chronically discharging sinus over neck, axilla, or groin
TB is unlikely if: the lymphnodes are small (< 2 cm) AND are persisting 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 - should particularly be done if FNAC not possible
• Hemogram with peripheral smear
• Cytopathology
DIAGNOSTIC
Peripheral Lymph node > 2cm in one or more sites
CHEST X-RAY
Look if
MATTED LN/COLD ABSCESS/SINUS
If chest x-ray abnormal: Get Sputum /Induced sputum/GA for NAAT and AFB
No
Yes
• Aspirate pus from sinus or pus from fluctuating lymph node.
• If no pus, do FNAC
• Send for NAAT, AFB smear, Cytopathology
• Send MGIT particularly if DRTB suspected
No
Antibiotics Amoxycillin/ Amoxycillin-Clavulanate are recommended (Avoid Linezolid & quinolones)
Review after 2 weeks
If no response
No
Mtb or AFB detected
Yes
Yes
AFB detected on smear and/or Mtb detected on NAAT and/or suggestive cytopathology like caseation or epitheloid granuloma present
No
Excision/core biopsy if facility available and send for NAAT, AFB smear, histopathology & TB culture
Choose appropriate regiment for DSTB vs DRTB based on NAAT result
Yes
Any of these positive
AFB on smear/ positive NAAT/caseous granuloma
No
Refer or investigate appropriately. Excision Biopsy may be needed.
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
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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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