



SNS COLLEGE OF ALLIED HEALTH SCIENCES
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DEPARTMENT: B. SC PHYSICIAN ASSISTANT
SUBJECT : Orthopaedics

Topic: BONE TUBERCULOSIS



DEFINITION



- Bone tuberculosis (Bone Tb) is a form of tuberculosis that affects bones and joints.
- It is caused by Mycobacterium Tuberculosis. Mycobacterium Tb spreads from the lungs or other areas of skeletal system.
- The most common type of bone Tb “**Spine tuberculosis**” is also called as “**Pott’s Disease**”.





INCIDENCE



This type of tuberculosis is more common in underdeveloped countries. It accounts for 2.2% to 4.7% of the total tuberculosis cases in Europe and the U.S.

CAUSES

Mycobacterium tubercle



TYPE OF BONE TB



Depending on the location of the infection in the body:

- Tuberculosis of the hip joint
- Tuberculosis in the elbow joint
- Tuberculosis of the knee joint
- Tuberculosis in the ankle joint
- Tuberculosis of the bones of the upper extremities



MODE OF TRANSMISSION



The infection can spread through your blood if you come in contact with an infected person's body fluids or pus.



CLINICAL MANIFESTATIONS



Early Stage:

Severe back pain

Swelling

Stiffness

Abscesses

Inflamed joints

Bone pain



Late stage:

Neurological disorder

Paraplegia/ paralysis

Limb-shortening in children

Bone deformities

Difficulty in moving or walking



DIAGNOSIS



- History collection
- Blood culture: takes a sample of blood or sputum to check for Tb
- Biopsy: taking a piece of infected tissue, such as bones or joints.
- Body fluid testing: Sip a little pleural fluid surrounding the lungs, cerebrospinal fluid or synovial fluid to test.



- Immunological tests: Using a sample of blood or body fluids to check for antibodies against tuberculosis and even AIDS

IMAGINING STUDY

- X-ray & MRI- Useful for if any abnormalities or deformities in bone





TREATMENT



- MEDICATION:

Anti-tuberculosis drugs- Rifampicin, Ethambutol, Isoniazid , Pyrazinamide.

Corticosteroids- Prevent complications such as inflammation of spinal cord or heart.



SURGICAL MANAGEMENT



- Surgical intervention may be necessary to remove infected tissue or repair damaged bones.
- ARTHRODESIS-In which two bones are connected with a common joint.
- LAMINECTOMY



ASSESSMENT



1. What is Bone Tuberculosis?
2. What is its diagnosis?



REFERENCE

Essential of Orthopaedic- John Ebnezar



Thank you