



Management of a patient not responding clinically to anti-tubercular therapy - Should second line drugs be started or a repeat biopsy needed to confirm resistance to primary drugs?



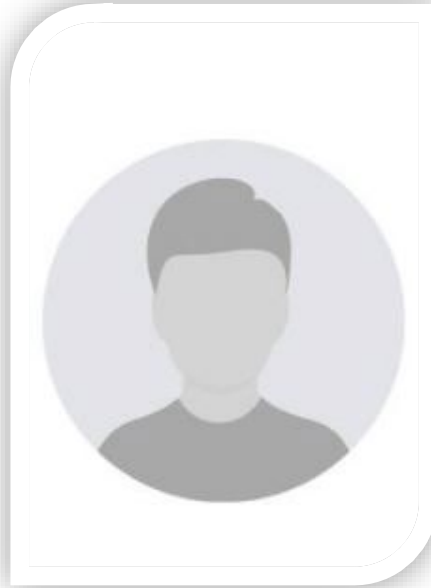
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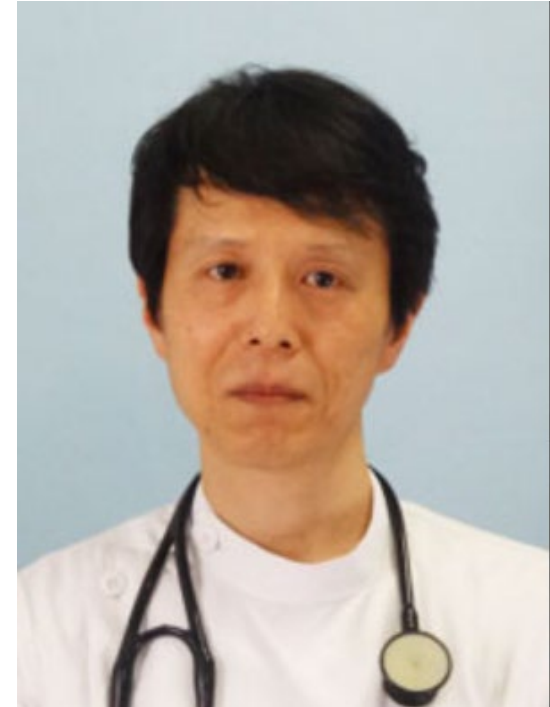
# 3rd Meeting of the International Consensus Meeting 8-10 of May, 2025 Istanbul



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## Why is this topic Important

- Drug resistance for TB is a global threat to TB elimination program.
  - Failure of treatment response to first line ATT is not so uncommon presentation.
  - Failure to show adequate clinical response to ATT could be because of paradoxical reaction to ATT or presence of drug resistance.
  - Hence it is important to develop consensus as to how to address failure of clinical response to ATT in bone and spine TB case



## Literature Review/ Process



PubMed



Clarivate  
Web of Science™



Cochrane  
Library



Scopus

- ❖ Number of articles retrieved---238
- ❖ Screening – 146
- ❖ Final number of publications -12
- ❖ 2 about disease burden
- ❖ 10 about proving drug resistance and treatment
- ❖ 6 articles in a sequence to suspect, laboratory investigation and treatment outcome in a consecutive series of cases by Jain et. al to develop an algorithm in such cases.



## Findings from Literature

- ❖ We need to suspect drug resistance in spine (Bone) TB on observing failure of clinical response to ATT at 4 months of ATT intake.
- ❖ Tissue to be procured by debridement/ guided biopsy for histology, genotypic DST (GeneXpert & LPA), phenotypic DST.
- ❖ Cases with proven drug resistance to be treated by individualized secone line ATT.
- ❖ Cases where drug resistance could not be proved to be treated by MDR protocol.
- ❖ Jain et.al. proposed an algorithm to suspect , investigate and treat cases who do not show adequate clinical response to ATT.





## **Question:**

- ❖ **Management of a patient not responding clinically to anti-tubercular therapy - Should second line drugs be started or a repeat biopsy needed to confirm resistance to primary drugs?**



## **Response:**

Compliant patients of TB spine not responding clinico radiologically to 4 months antitubercular therapy should be **submitted for biopsy** to ascertain diagnosis of tuberculosis and drug resistance by subjecting the tissue obtained for Histology, AFB culture (phenotypic DST) and GeneXpert and Line probe assay( Genotypic DST).



## ❖ **Vote:**

**Agree – 100%, Disagree – 0%, Abstain – 0%**  
**(Unanimous Consensus)**