



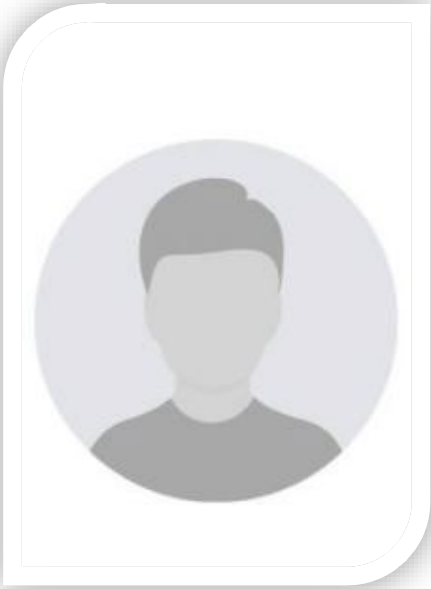
3rd Meeting of the International Consensus Meeting  
8-10 of May, 2025 Istanbul



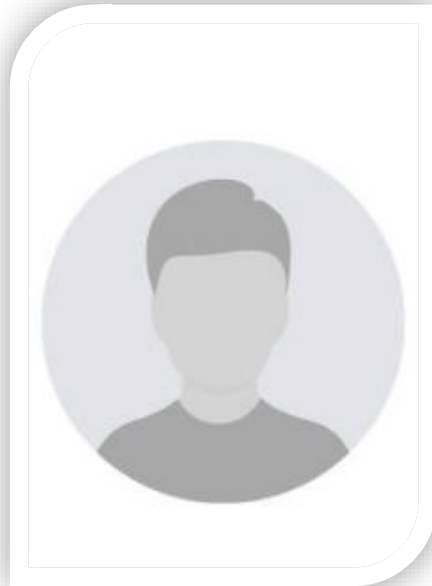
What is the optimal management of patients with spinal infection and inconclusive biopsy?



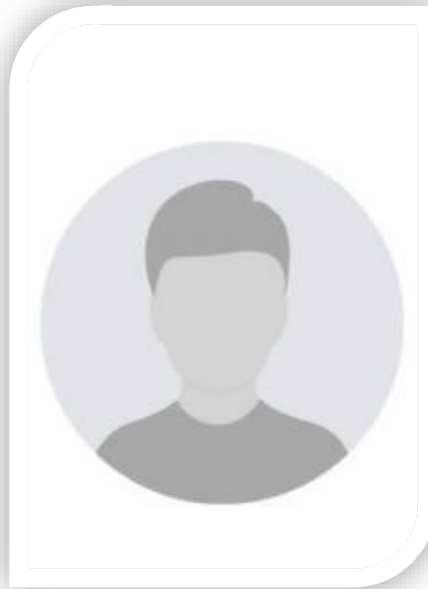
# 3rd Meeting of the International Consensus Meeting 8-10 of May, 2025 Istanbul



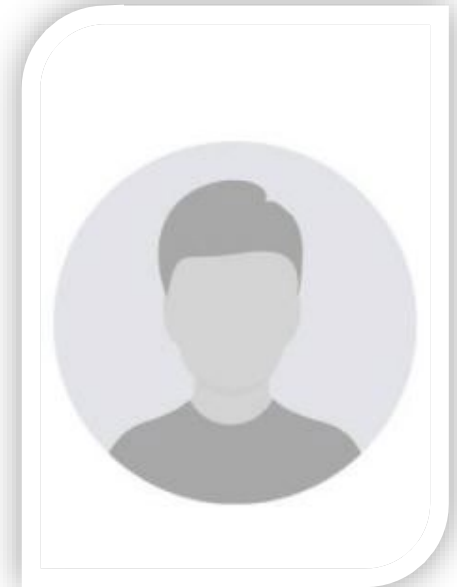
Dilip Chand Raja  
Soundararajan



Hirotaka Chikuda



Dr Julian Scherer



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## Why is this topic Important

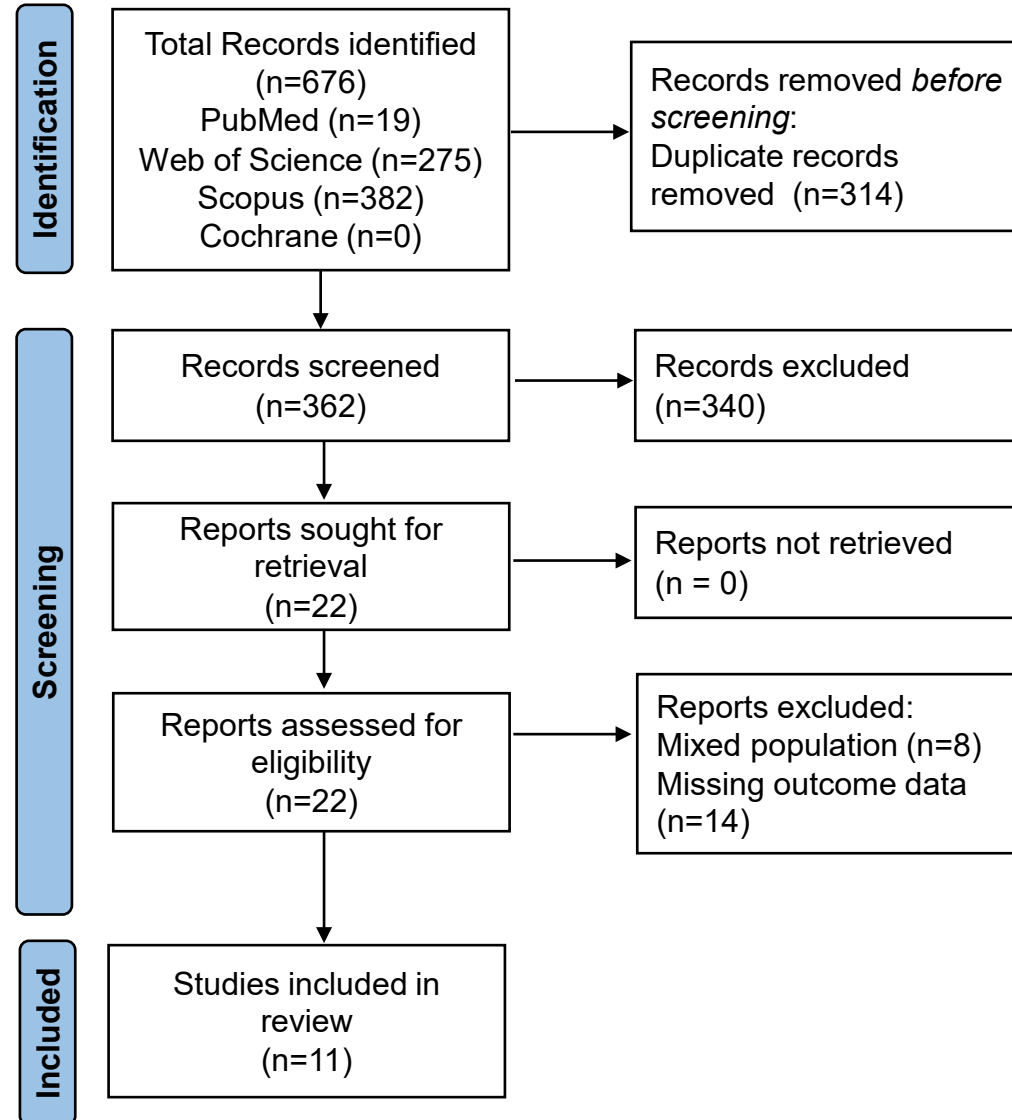
- Administering empirical antibiotics without identifying the causative pathogen in spinal infections is universally discouraged, except in cases of sepsis or severe immunocompromise.
- When biopsy results are inconclusive, treatment decisions become challenging, requiring a balance between empirical antimicrobial therapy and further diagnostic interventions.
- Establishing clear management guidelines helps clinicians optimize patient outcomes, reduce unnecessary procedures, and enhance diagnostic accuracy in complex cases.
- Addressing this issue also contributes to improved healthcare resource utilization and better long-term prognoses for affected patients.



## Literature Review/ Process



Scopus





## Findings from Literature

- A second percutaneous biopsy, though commonly recommended, lacks definitive evidence of improving pathogen detection, making open biopsy the preferred next step after consecutive negative needle biopsies. Additionally, ruling out alternative sources of infection, such as infective endocarditis or gastrointestinal and genitourinary infections, is crucial before initiating empirical treatment.



## Findings from Literature

- Pathogen prevalence varies geographically, with brucellosis being more common in Mediterranean and Middle Eastern regions, while tuberculosis dominates in Southeast Asia. Given the risks associated with antimycobacterial drugs, empirical anti-tuberculous chemotherapy is no longer advised.
- Instead, histopathology plays a vital role in diagnosing granulomatous infections, particularly tuberculosis, when cultures are negative. In endemic regions, worsening clinical signs despite standard antibiotic therapy often prompt the initiation of antitubercular treatment, even without positive culture confirmation.



## **Question:**

**What is the optimal management of patients with spinal infection and inconclusive biopsy?**





## **Response:**

- ❖ **Recommend for second percutaneous biopsy.**
- ❖ **When blood cultures and two consecutive needle biopsies are negative, open biopsy is recommended.**
- ❖ **In cases where all attempts to isolate the organisms has not been successful, antibiotic management must be based on the spectrum of the bacterial infection usually observed in the geographical location.**





## ❖ **Vote:**

**Agree – 90.6%, Disagree – 3.8%, Abstain – 5.7%**  
**(Unanimous Consensus)**