



Q T8: Is a tissue biopsy required in all patients with typical MRI features of spinal tuberculosis, even in endemic areas for tuberculosis?



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Why is this topic important?

- **Tuberculosis is endemic in countries that are resource poor and with limited access to tertiary care facilities**
- **Medical treatment for spinal tuberculosis could be commenced earlier if it could be based on typical MRI features alone**
- **Early treatment can reduce severity and lower the incidence of complications**
- **Empirical use of anti-tuberculous medication is commonly practiced**
- **This practice can lead to treatment failure in a subset of patients**



Literature Review/ Process

Studies from Database/Registers: (n= 1676)

Resolved Duplicates: (n=456)

Total studies considered: (n=1220)



Studies Screened: (n=1220)

Studies Excluded: (n=1062)



Studies sought for retrieval: (n=158)

Studies assessed for Eligibility: (n=158)



Studies excluded: (n=82)

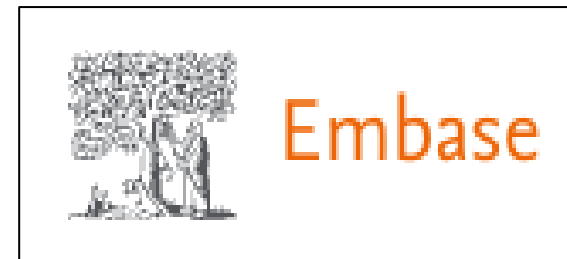
Not relevant (n=41);

Wrong design(n=11);

Wrong population (n=30)



Studies included in review: (n=76)





Findings from Literature

- Magnetic resonance imaging is still the modality of choice
- Sensitivity of 100%, Specificity of 80%, and an Accuracy of 90%
- Difficult to differentiate tuberculosis and non-tuberculosis lesions based on clinical and MRI features alone in all cases
- Metastasis, lymphoma, and other primary spine tumors can mimic appearance
- The proportion of multi-drug resistant tuberculosis is estimated to be about 3% in new cases and over 15% in previously treated patients



Findings from Literature

- Needle biopsy can either be done under fluoroscopic or computed tomographic guidance
- Safe and accurate technique
- Inconclusive results despite biopsy in 24.2%
- Marked variation in assessment of the need for tissue biopsy: Consensus needed

Level of evidence: Moderate



Question:

T8: Is a tissue biopsy required in all patients with typical MRI features of spinal tuberculosis, even in endemic areas for tuberculosis?



Response:

Yes. A tissue biopsy is advisable in all patients, despite typical MRI features of spinal tuberculosis, even in endemic areas for tuberculosis, based on current available evidence

Level of evidence: Moderate



***Vote:**

Agree – 98.1%, Disagree – 0%, Abstain – 1.9%
(Unanimous Consensus)