

Sp2: Are systemic clinical symptoms like low-grade fever, malaise, fatigue and loss of weight important in the diagnosis of spinal tuberculosis?

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Recommendation: The Constitutional symptoms in Spinal Tuberculosis are less common than in Pulmonary Tuberculosis; Pain is the commonest feature. Neurological deficits are widely variable.

Strenth of Recommendation: Moderate

Delegate Vote:

Rationale:

There are 5 symptoms that have been consistently reported- back pain, fever, loss of weight and night sweats and neurological deficits, though the frequency seems to vary slightly. Back pain is the most consistent feature with 70.4 -100% prevalence, with the median values well over 90%. Fever ranges from 17% to 80% (the latter only in one study from Iran (5) ; else the values are between 25- 35%). Weight loss ranges between 14.5% and 96.7%- the latter is only in the Khan study from Pakistan (11); otherwise the highest is 66.7% in the Baran study from Turkey (4); average is in the 30s.) Night sweating has been recorded between 14% and 74.6%, the latter an outlier from Tunisia(14); the mean around 25%. Neurological deficits also range from 1.4% (Pakistan) (11) and 77.1% by Su of Taiwan (mean in the 40s) (17)

Temporal and spatial variations of systemic manifestations were also studied. The classic can be considered to be Baydur A's study of 1977 (21) where the author says that fever was consistent feature of Tb spine. Others (Colemenro of Spain (20) and Nussbaum (15) of the USA) in 1997 and 1995 respectively reported 35 and 45% fever; these authors report 62 and 76% neurological deficits at presentation. This is in contrast to Broderick from UK (8) and Khan (11) from Pakistan stating that constitutional symptoms are uncommon (2018 and 2021). The latter also reports a very low prevalence of neurological deficits (1.4%)

Summary of findings in the papers studied:

1. Chen et al, Taiwan 2016. 2040 cases reported world wide (?); Back pain is 70.4%; fever 32.7%; weight loss 30.3%; neurology 30.1%; night sweats 19.1
2. Alavi SM et al; Iran, 2010; 69 cases; Back pain 98.5%; fever 26.1%; weight loss 14.5%; night sweat 17.4%; Neurology 26.1%
3. Cormican L et al 2006, London UK 21 cases; Back pain 100%, fever 24%, weight loss 24%; night sweats 29%; Neurology 19%
4. Baran AI et al. Turkey 2024; (N 15) Back pain 93.3%, fever 53.3%, weight loss 66.7% ; night sweats 46.7%; Neurology 40%
5. Khorvash F et al. 2007 Iran; N=100; Back pain 99%, fever 80%, weight loss ; night sweats ; Neurology 36%;
6. Alothman A et al 2001, Saudi Arabia. N=103; Back pain 84%, fever 32%, weight loss 27.5% ; night sweats 22% ; Neurology 35%
7. Hammami F et al 2020, Tunesia; N= 73; Back pain 74%, fever 45.2%, weight loss 50.7%; night sweats 47.9% ; Neurology 13.7%
8. Brroderick C et al 2018 UK; N= 8/31 MSK Tb; Back pain, fever 21%, weight loss 56% ; night sweats 14%; Neurology; *Constitutional symptoms are uncommon*

9. Corti M et al 2012 Argentina. N=22; Back pain 95%, fever 31.9%, weight loss ; night sweats ; Neurology 13.6% Constitutional symptoms 27.3%
10. Erdem H et al 2015 turkey; N=314; Back pain 83.12% , fever 44.27%, weight loss 42.04%; night sweats 48.4% ; Neurology 39.49%
11. Khan MNH et al. 2021, Pakistan N=305; Back pain 99%, fever 57.7%, weight loss 96.7% ; night sweats ; Neurology 1.4% *Fever, night sweats are rare; neurology rare*
12. Javed G yet al. 2018, Pakistan; N=50; Back pain 84%, fever 20%, weight loss ; night sweats ; Neurology 54%
13. Kim CJ et al 2010. S Korea. N=47. Back pain 87.2%, fever 17%, weight loss ; night sweats ; Neurology 27.7%
14. Boussaid S et al 2023, Tunisia, N=52. Back pain 90.4%, fever 36.5%, weight loss 34.6% ; night sweats 34.6% ; Neurology 17.3%
15. Nussbaum ES et al. 1995 USA Minnesota . N =29. Back pain 79%, fever, 45%; weight loss ; night sweats ; Neurology 76%
16. Schlesinger N et al USA 2005. N=12. Back pain 75%, fever, weight loss ; night sweats ; Neurology 33.3%. *Few systemic features unlike pulm Tb.*
17. Su SH et al Taiwan 2010, N=48. Back pain 95.8%, fever 39.6%, weight loss ; night sweats ; Neurology 77.1%
18. Louw QA et al. 2019 SA. Systematic review of case studies. 28 papers. Back pain is commonest; fever is unusual, weight loss and night sweats are characteristic ; Neurology 33%
19. Tuba Turunc et val Turkey 2007. N=13; Back pain 100%, fever 76.9%, weight loss ; night sweats 74.6%; Neurology 61.5% *ccompariosn of Bruce, and Pyo*
20. Colmenero JD et al 1997, Spain. N=47. Back pain 90%, fever 32%, weight loss ; night sweats ; Neurology 62%
21. Baydur A USA 1977. N=62. Classic Fever was commonly reported.

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