

Clinical characteristics of tuberculous lymphadenitis in Central India



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BACKGROUND

Tuberculous lymphadenitis (TBLA) is the most common form of extrapulmonary tuberculosis (EPTB), causing morbidity and stigma in high burden settings. Diagnosing TBLA is challenging, and consequently many patients are started empirically on anti-tuberculous treatment. This leads to unnecessary morbidity and an increased risk of developing resistance to anti-TB drugs. More knowledge on the clinical characteristics of TBLA could aid clinicians in rural, low-resource settings to make appropriate decisions on initiation of anti-tuberculous treatment.



A 19 year old man with tuberculous lymphadenitis

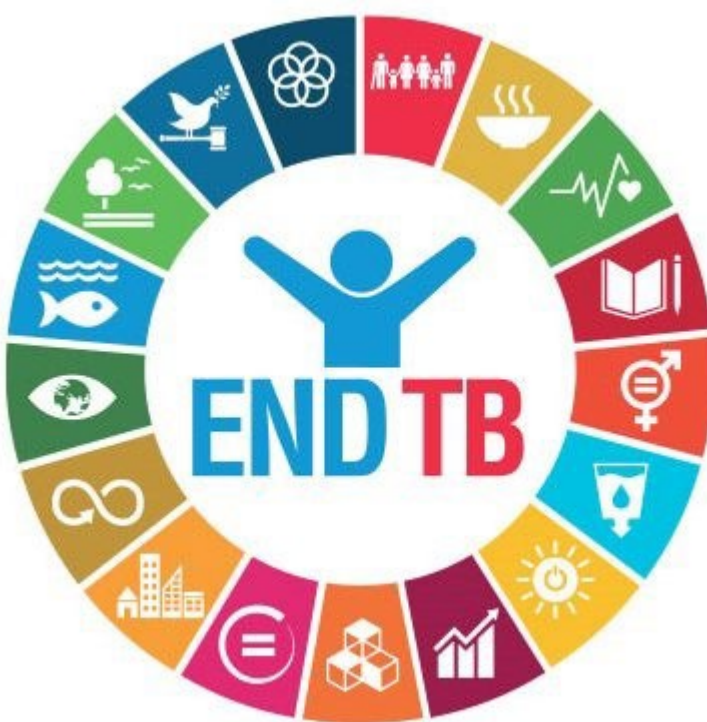
METHODS

Adults presenting with symptoms suggestive of TBLA at a tertiary care hospital in Ujjain, India, were included in the study (n =233). Clinical examination was performed, and samples were subject to routine TB diagnostic work-up. Patients were followed for six months, or until the end of treatment

Table 1. Demographic and clinical characteristics of TBLA (N = 223)

	TB (N= 139) n/N (%)	Non-TB (N = 84) n/N (%)	P-value
Gender			
Female	97 (70)	42 (50)	.003
Age groups (years)			
15-29	89 (64)	38 (45)	.004
30-44	34 (25)	23 (27)	
≥ 45	16 (11)	23 (28)	
Systemic symptoms^a			
Any	120 (86)	61 (73)	.011
≥ 2 symptoms	106 (76)	47 (56)	.002
Fever	78 (56)	43 (43)	.055
Weight loss	80 (58)	33 (39)	.008
Night sweats	34/137 (25)	15 (18)	.227
Fatigue	101 (73)	48 (57)	.017
Local findings			
Tender	44 (32)	26 (31)	.913
Matted	62 (45)	27 (32)	.066
Discharge	5 (4)	3 (4)	1.00
Right side	74 (53)	40 (48)	.309
Posterior triangle	67 (48)	31 (37)	.054
Unilateral	113 (92)	69 (91)	.791
Duration of symptoms			
< 2 weeks	24 (17)	30 (36)	.002
1 – 2 months	26 (19)	13 (16)	.539
>2 months	45 (32)	22 (26)	.329
Biochemical findings			
Low hemoglobin (Hb) ^b	98 (71)	49 (58)	.063
Elevated ESR ^c	108/132 (82)	66/82 (81)	.808
Elevated TLC ^d	11/138 (8)	10 (12)	.331

Statistically significant (p <0.05)^a Systemic symptoms: fever, weight loss, loss of appetite, night sweats, fatigue.
^b Hb < 12 g/dl for females and < 13 g/dl for males. ^c ESR > 20 mm/hr. females, > 10 mm/hr. males. ^d TLC > 11 000 /μl.
Abbreviations: TBLA: tuberculous lymphadenitis. ESR: erythrocyte sedimentation rate. TLC: total leukocyte count



TB patients have a high pill burden. The treatment is long and consists of several antibiotics.

RESULTS

Based on a composite reference standard (CRS), 139 patients were categorized as TB cases and 84 as non-TB. A significantly higher proportion of TB patients (86%) presented with systemic symptoms compared to the non-TB group (73%). Seventy-six percent of TBLA patients had two or more systemic symptoms (Tab. 1). Weight loss, fatigue and a duration of symptoms of more than two weeks were more common in the TB group.

CONCLUSIONS

- Most TBLA patients presented with multiple systemic symptoms.
- Weight loss, fatigue and a symptom duration of more than two weeks was associated with TB.
- Local findings were not specific for TBLA.
- More research is needed on the correlation between symptoms and treatment outcome to make future stratified treatment recommendations for TBLA.