

“Twist of the Tongue: Isolated 12th Cranial Nerve Palsy in Cervical Tubercular Lymphadenopathy”

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Aim

□ While cervical tubercular lymphadenopathy is a common extrapulmonary form of tuberculosis, cranial nerve involvement is exceedingly rare. Isolated 12th cranial nerve (hypoglossal nerve) palsy is particularly unusual. We report a rare case of isolated left hypoglossal nerve palsy in a young female secondary to compressive cervical tubercular lymphadenopathy.

Methodology

- We present the clinical profile, diagnostic evaluation, imaging findings, and treatment response of a 17-year-old girl with isolated left hypoglossal nerve palsy associated with tuberculous lymphadenopathy.

Clinical Presentation

- ❑ 17-year-old female with slurred speech and tongue deviation for 3 weeks
- ❑ Exam: Isolated left 12th cranial nerve palsy
- ❑ Tongue deviated to left with mild atrophy
- ❑ No other cranial nerves or limb motor deficits
- ❑ Firm, non-tender lymph node at left Level 1b (submandibular region)



Investigations

- ❑ MRI neck: Enlarged necrotic lymph node near hypoglossal canal
- ❑ → Mass effect on left hypoglossal nerve
- ❑ FNAC: Granulomatous inflammation consistent with tuberculosis
- ❑ GeneXpert: Positive for *Mycobacterium tuberculosis*

Treatment

- ❑ Standard 4-drug anti-tubercular therapy initiated
- ❑ Regular follow-up advised
- ❑ At 6 months follow-up:
 - ❑ → Persistent tongue deviation
 - ❑ → Mild improvement in articulation
- ❑ No new neurological deficits

Discussion

- ❑ Isolated hypoglossal nerve palsy is a rare presentation of cervical tubercular lymphadenopathy
- ❑ Mass effect from lymph node near hypoglossal canal likely cause
- ❑ Anti-tubercular therapy remains cornerstone of treatment
- ❑ Residual deficits may persist despite therapy

Conclusion

- ❑ This case highlights an uncommon presentation of cervical tubercular lymphadenopathy with isolated hypoglossal nerve palsy in an adolescent.
- ❑ Early imaging and tissue diagnosis are essential for timely treatment and to prevent permanent neurological sequelae.