VOLUME - 14, ISSUE - 03, MARCH - 2025 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra

Original Research Paper | Pulmonary Medicine

# TWISTS OF FATE:? TUBERCULOSIS OR TERATOMA, DECODING THE MEDIASTINAL MASS

**Dr. Ch V S Preetham Chowdary** — MBBS INTERN, KIMS& RF, Amalapuram.

**Dr. Ch V Rohitha*** — Pulmonology Postgraduate, RMC Kakinada. *Corresponding Author

**ABSTRACT** Mediastinal teratomas can mimic tuberculosis (TB) and malignancies, posing diagnostic challenges. This case study presents an 18-year-old female with dyspnea and chest pain, initially suspected of TB. However, imaging revealed a cystic mass with calcifications, and FNAC confirmed a cystic teratoma. This highlights the need for comprehensive diagnostics, including CT, MRI, biopsy, and tumor markers, to differentiate teratomas from TB, ensuring timely and appropriate treatment.

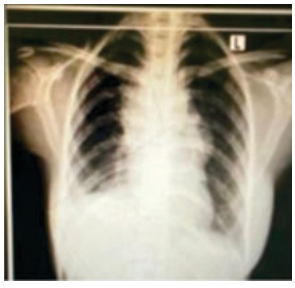
**KEYWORDS :** Mediastinal teratoma, tuberculosis, germ cell tumor, mediastinal mass, diagnostic challenge, FNAC, CECT chest, pleural effusion, lymphadenopathy, biopsy, tumor markers, extrapulmonary tuberculosis, surgical intervention, differential diagnosis, pulmonary medicine.

## INTRODUCTION

Teratomas are germ cells tumors, containing diverse Components, primarily found in ovaries, testes, rarely in mediastinum Mediastinal teratomas presents as chest pain, cough,and dyspnoea mimicking common conditions like tuberculosis & malignancy. This overlap in symptoms,coupled with radiological findings of mediastinal mass, pleural effusion, and lymphadenopathy, poses significant diagnostic challenges.

### Case Study

18 year female came with complaints of dyspnoea , right sided chest pain radiating to back along with dragging sensation of right shoulder since 3 months.

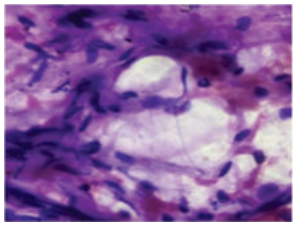


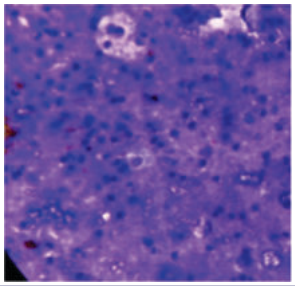
### CECT Chest

12*10*5 cm mass lesion with multiloculated cystic,fat areas and calcifications noted in the prevascular compartment extending suprasternally in to the neck. Post contrast lesion shows septalenhancement. anterior mediastinal mass with multiloculated cystic, fat and calcifications in prevascular compartment ?Teratoma.

### FNAC Anterior Mediastinal Lesion -

Section shows discrete and few clusters of squamous epithelial cells, pigment laden macrophages and few fragments of adipose tissue with cholesterol clefts in background.? cystic teratoma.

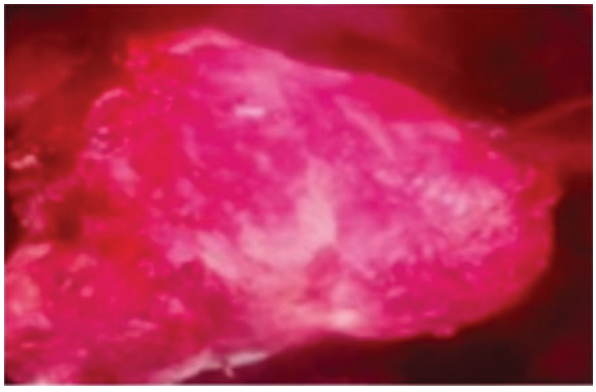




**Sputum CBNAAT** – MTB Not Detected.

**Plleural Fluid Analysis :** small mature lymphocytes , ADA 56.8, LDH 372 , protein 2.15 , sugars 67.

### Excision Biopsy Features Consistent With Mature Teratoma.



**Past History:** She had a usage of ATT usage for sweellinng over front of neck.

**Usg Neck :** suggesting of ? mass / lymph node.

**FNAC :** suggestive of benign cystic lesion ? bfranchial cyst or thyroglossal cyst

**CBNAAT :** MTB detected.

## DISCCUSSION

Mediastinal teratomas grows undetected for long periods presenting with symptoms which are also hallmarks of TB and malignancy. This discussion explores complexities involved in distinquishing teratomas from TB when presenting as mediastinal mass emphasising the importance of tailored diagnostic approaches ,which is crucial for clinicians to avoid diagnostic pitfalls and ensure timely and accurate treatment.

## CONCLUSION

This case highlights necessity for meticulous diagnostic evaluation CT, MRI, coupled with biopsy and tumor marker,which plays pivotal role in achieving accurate diagnosis. Early recognision of teratomas is crutial to avoid delays in appropriate surgical intervention and recurrance . In TB endemic area it is important to consider mediastinal teratomas for extrapulmonary TB not responding to treatment.

## REFERENCES

1) BouassidaI, AyedAB, OuhichiS, SaadA, ZairiS, MarghliA. Ahugemediastinal teratoma ina14-year-old girl.IntJSurgCaseRep. 2023 Dec;113:109003.

doi:10.1016/j.ijscr.2023.109003. Epub2023 Oct 29.
2) Riahi,I.,Fradi, R.,Jaafoura,H.etal.Acervical tuberculousabscess mimicking a fourthbranchial cleft cyst ina child: PCR, the key to fast diagnosis. Egypt J Otolaryngol 36, 14 (2020)