

Chest Wall Tuberculosis - An Extension of Mediastinal Tuberculosis

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Abstract: Tuberculous abscess of chest wall accounts for 1-4% of musculoskeletal tuberculosis which in case accounts for 1-2% of all types of tuberculosis. It is a rare form of extrapulmonary tuberculosis. It is rare in immunocompetent patients to have chest wall abscess with concomitant tubercular lymphadenitis of neck and mediastinum[1]

Keywords: Tuberculosis, Chest wall, Abscess, CT Chest, lymph node

1. Introduction

Tuberculosis is a major health problem, and can be a multisystemic disease. Tuberculosis of chest wall usually presents with abscess in the chest wall. Herein, we report a case with such a rare presentation.

2. Case Report

An 18 year old female student referred to Government medical college hospital, city of Surat, state of Gujarat, India with chief complains of cough with mucoid sputum since 3 month, fever, swelling over right side of neck and painful right sided chest swelling since 1 month. There was no history of breathlessness or haemoptysis and no history of contact with a case of tuberculosis. On examination, the patient was moderately built and nourished with normal pulse rate and blood pressure. She had right sided cervical lymphadenopathy. Local examination revealed a swelling in right sided of chest. The swelling was painful, soft in consistency with no local rise in temperature. The swelling was also fluctuant and irreducible, had no cough impulse. The patients haemoglobin was 10.6 gm%. Her complete blood count was in upper normal limits and platelets counts were in normal limits. Her erythrocyte sedimentation rate was 6 mm. Contrast enhanced computed tomography of thorax showed features suggestive of pulmonary tuberculosis in bilateral upper lobes. The CT also shows multiple varying sized necrotic and conglomerated mediastinal lymph nodes with encasement of SVC and left brachiocephalic vein. Conglomerated nodes of anterior mediastinum appeared to extends into anterior chest wall via 2 cm wide tract through 1st and 2nd intercostal space forming (53x40x18) (SIxMLxAP) mm sized multilocular collection in intramuscular plane on right side. Fine needle aspiration cytology (FNAC) of right cervical lymph node showed features of tubercular lymphadenitis. Sputum analysis revealed acid fast bacilli. Patient was on anti tubercular therapy since 3 months which was advised to continue for six months.

3. Result

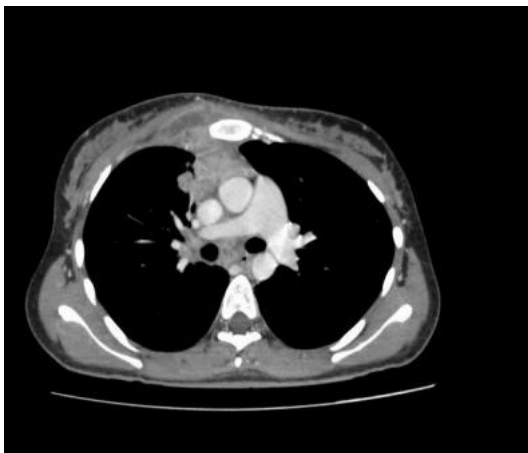
Tubercular chest wall abscess is a rare form of extrapulmonary TB. The disease may also involve lymph nodes including mediastinal, mesenteric or cervical and visceral lesions. Computed tomography is necessary for assessing tuberculous chest wall lesions, as it elucidates the nature and extend of soft tissue collections, intrathoracic adenopathy and bone erosion.[2] Our case of chest wall TB is a rare case. There are not many literature reports on the treatment of the disease. Therefore, an optimal treatment strategy is controversial. Anti tubercular therapy is the cornerstone of the treatment of tuberculous abscess of chest wall, surgical treatment also plays a vital role.



Sagittal view: Conglomerated nodes of anterior mediastinum appeared to extends into anterior chest wall



Coronal views: CT also shows multiple varying sized necrotic and conglomerated mediastinal lymph nodes with encasement of SVC and left brachiocephalic vein



Axial view: multilocular collection in intramuscular plane on right side.

4. Conclusion

The occurrence of cold abscess of the chest wall with concomitant pulmonary tuberculosis and tubercular lymphadenitis of neck and mediastinum has rarely been described in an immunocompetent individual. Computed tomography is necessary for assessing tubercular chest wall lesions and study its nature and extend. Anti tubercular therapy is the cornerstone of the treatment of tuberculous abscess of the chest wall.

References

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