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Case Report

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Tuberculosis Mimicking as Lymphoma: A Case Report

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Abstract

Tuberculosis remains a worldwide health problem causing morbidity and mortality. TB mainly affects the pulmonary system, but also involves extrapulmonary sites, including lymph nodes. Among the numerous causes of lymphadenopathy, tuberculosis and lymphoma are both relatively common and potentially curable. The clinical features of tuberculous lymphadenitis overlap with those of lymphoma. some patients with each condition are asymptomatic apart from painless swelling, whereas others are unwell and have systemic symptoms such as fevers, weight loss, or night sweats. Accurate diagnosis depends on confirmation with appropriate pathology tests. In this report, we presented lymphnode tuberculosis patient presenting with multiple lymphadenopathies that mimics lymphoma.

Keywords: Tubercular Lymphadenitis, Lymphoma

Introduction

Tuberculosis (TB) is an infectious disease usually caused by the bacterium Mycobacterium tuberculosis[1].Tuberculosis (TB) remains a common infectious disease of a significant medical burden, especially in developing countries.[2,3] TB mainly affects the pulmonary system, but also involves extrapulmonary sites, including lymph nodes. On clinical examination, TB involving lymph node, but without pulmonary involvement, may present with fever, weight loss, pain, or without any symptoms, similar to lymphoma.To differentiate between systemic lymph node tuberculosis and lymphoma is a challenging one. This article reports a case of systemic lymph node TB mimicking lymphoma.

Case Report

A 26-year-old man presented to our hospital with pain in his right lower quadrant of abdomen that persisted for 1 month, but without fever and diarrhea. No history of loss of apetite but history of weight loss present. His previous medical history was unremarkable. Physical examination revealed tenderness in the right lower quadrant of abdomen. Laboratory finding as follows erythrocyte sedimentation rate 20 mm/h, leukocyte 5200/µl, neutrophils 70%, lymphocyte 28%, monocyte1%, eosinophils1%, platelet 2.4lakh per mm^3. HIV is non reactive. Hemoglobin 12.5.Mantoux test is reactive (13mm). Peripheral blood smear shows normocytic normochromic with evidence of microcytes. No haemoparasite seen. Chest x ray shows bilateral hilar

prominence(figure1). Ultrasound abdomen shows multiple lymph node masses in peripancreatic, pre and para aortic, pre and para illeal and mesenteric region. CECT of chest shows multiple well defined nodular masses in the middle and posterior mediastinum. The enlarged lymph nodes are located in the para aortic, right para tracheal, subcarinal, aorto pulmonary and bilateral hilar regions, largest single nodal mass measuring 4.5*3.5cm in para oesophageal location(figure2). Multiple enlarged nodal masses forming conglomerate are also seen below the diaphragm in the mesenteric, peripancreatic and periportal region. Further abdominal lymph node aspiration was done under CT guidance and sent for histopathology. The histopathology report showed caseation necrotic clumps, epithelioid macrophages and langhan's giant cells and very few scattered lymphocytes in the background.

According to the above results, a clinical diagnosis of lymph node tuberculosis was made. The patient is started with anti tuberculous daily regimen for new case.

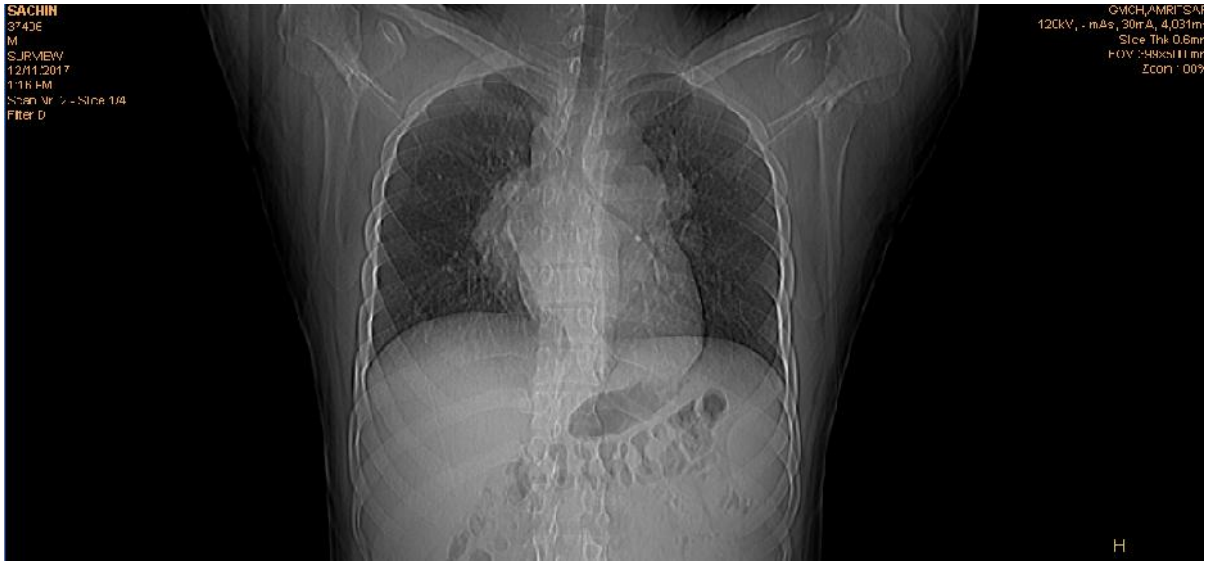

Figure 1. Bilateral hilar prominence

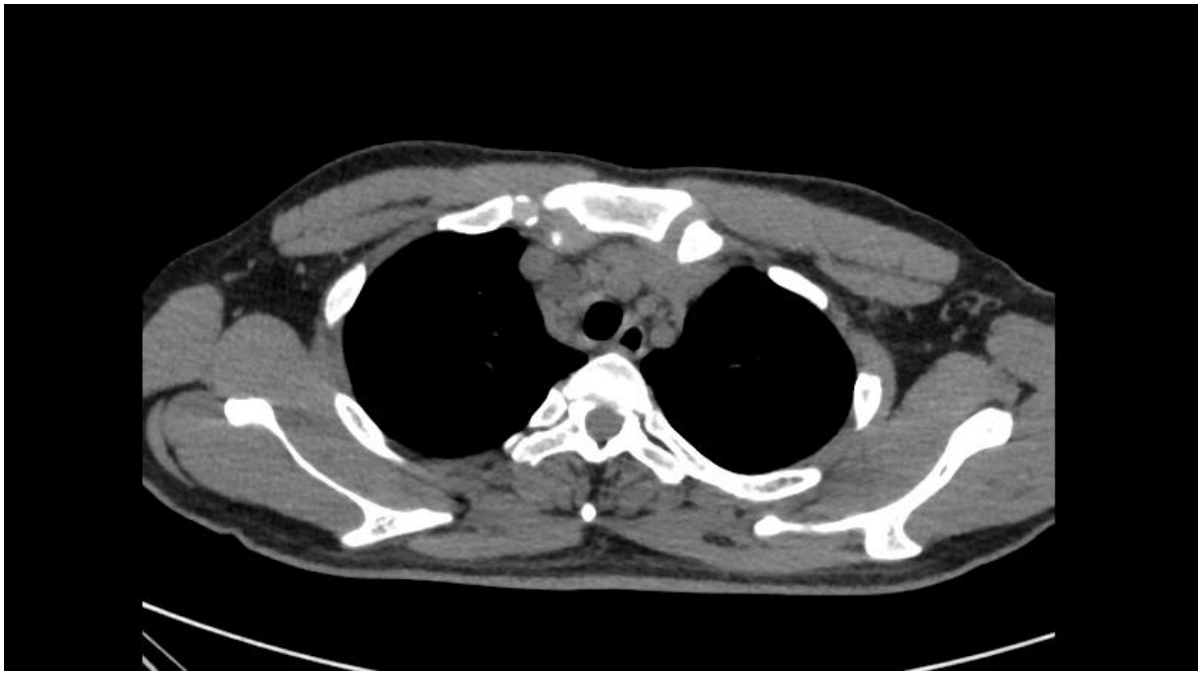

Figure 2. Multiple well defined nodular masses in the middle and posterior mediastinum. The enlarged lymph nodes are located in the para aortic right para tracheal, subcarinal, aorto pulmonary and bilateral hilar regions.

Discussion

TB remains a major health problem worldwide, especially in developing countries. It has been ranked as the second leading cause of death from an infectious disease other than the human immunodeficiency virus (HIV)[4]. India accounts for one fourth of the global TB burden. In 2015, an estimated 28 lakh cases occurred and 4.8 lakh people died due to TB[5]. Early diagnosis promotes effective treatment and leads to a reduced onward transmission of TB. However, patients with sputum-negative Pulmonary TB and extrapulmonary TB (EPTB) are difficult to diagnose due to an absence of clinical signs and bacteriological basis, resulting in a significant delay of the appropriate treatment. LNTB is considered to be the most common form of EPTB[6,7] and the most frequently affected site is the cervical lymph nodes, followed by the mediastinal lymph nodes[8].

Lymphadenopathy, fever, weakness, night sweats, and weight loss are the most common clinical presentations of LNTB, causing a notable risk of confusing Lymphnode TB with lymphomas[9,10]. Diagnostic imaging also presents challenges in the diagnosis of Lymphnode TB, as symptoms of Lymphnode TB may mimic those of other diseases such as neoplasms or sarcoidosis[11].

On clinic, TB occurring in lymph nodes usually manifests no typical symptoms. Hence, the diagnosis of lymph node TB is difficult, especially in the absence of pulmonary manifestations and medical history of TB. Furthermore, lymphoma also has no typical symptoms and may manifest with enlarged lymph nodes, fever, drenching sweats, weight loss, itching, and feeling of tiredness. The enlarged lymph nodes are usually painless. Therefore, differentiating between systemic lymph node TB and lymphoma is difficult. In this case patient did not present with typical symptoms of tuberculosis such as evening rise of temperature, loss of apetite, diarrhea. Patient presented with only abdominal pain and weight loss. The final diagnosis was confirmed by FNAC of abdominal lymph node. Caseous necrosis is an important part of tuberculosis. The two diseases also differ in terms of the location of lymph nodes. In lymph node TB, most lymph nodes with intense accumulation are clustered in the liver portal area, pulmonary hilar area, and neck area. By contrast, lymph nodes in patients suffering from lymphoma are more widely distributed. Also Lymph node TB usually has no obvious liver or splenic space-occupying lesions, whereas lymphoma manifests as hepatosplenomegaly or space occupying lesions in liver or spleen. Caseous necrosis in TB frequently leads to calcification and manifests as hyperdense mass in the lymph node by CT scan. Conversely, lymphoma rarely presents calcification.

Conclusion

In conclusion lymph node tuberculosis can easily mimicks lymphoma. In ultrasound and CT scan both present as multiple lymph node masses hence difficult to differentiate them. This uncommon case underscores the necessity of considering lymph node tuberculosis as a possible differential diagnosis in systemic enlarged lymph nodes.

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