Sir,

Kikuchi disease is a rare condition characterized by cervical lymphadenopathy and often confused with Koch’s. When new cervical nodes develop in an already established case of tuberculous mass in the mediastinum, it can so easily be passed off as an extension of the Koch’s rather than suspecting a superimposed condition like Kikuchi disease. We present such a rare occurrence of Kikuchi disease in a Koch’s patient who has not been reported in the literature earlier.

A 33-year-old male presented with cough for 1 month, associated with feverishness and loss of appetite. No history of tuberculosis (TB), but during his childhood, he had contact with his father who had suffered from TB. Chest radiograph was suggestive of left hilar mass. Contrast-enhanced computed tomogram (CT) scan of the chest had shown minimally enhancing soft-tissue mass in the anterior mediastinum also involving the anterior segment of the left upper lobe and small volume nodes were noted in precardinal and left hilar region [Figure 1].

A CT-guided biopsy of the mediastinal mass was done. Histopathology had revealed necrotizing granuloma [Figure 2]. Antituberculous treatment (ATT) was started with rifampicin, isoniazid, ethambutol, and pyrazinamide. After a couple of weeks of ATT, he started developing high-grade fever intermittently. On repeat examination, the left cervical lymph node was found to be enlarged measuring about 2 cm on ultrasonogram (USG) of the neck. USG abdomen had revealed a calcified granuloma in the right lobe of the liver and no lymphadenopathy.

Complete blood picture, creatinine, and liver function tests were normal. Erythrocyte sedimentation rate raised to 24 mm in 1st h. Blood, urine, and sputum cultures were negative. Sputum smear was negative for acid-fast bacilli (AFB) or fungi. Widal test was negative. Blood smear for malarial parasite and Parasite-F (P falciparum rapid antigen test) also were negative. HIV, hepatitis B surface antigen, and anti-hepatitis C virus antibodies were negative. Serum antinuclear antibodies and rheumatoid factor were negative. As the fever developing in spite of ATT, and the persisting large mediastinal mass, it was decided to add streptomycin and levofloxacin to the ATT and to carry out excision biopsy of the left cervical node to rule out any coexisting lymphoma. Histopathology and immunohistochemistry studies have favored the diagnosis of necrotizing lymphadenitis that is Kikuchi’s lymphadenitis [Figure 3].

Over a period of 1 week, he became afebrile, and over the next 4 weeks, his cervical lymphadenopathy had resolved. BACTEC cultures for TB of the lymph node samples turned out to be negative. A repeat CT scan of chest done after the completion of 6 months of ATT had shown complete resolution of the mediastinal lesions and the cervical nodes with some fibrotic scarring of the anterior segment of left upper lobe of lung and no evidence of any active lesion.

Kikuchi disease is an idiopathic histiocytic necrotizing lymphadenitis and is generally self-limiting over few weeks to months. It most commonly presents with cervical lymphadenopathy with or without systemic manifestations. Involvement of other groups of lymph nodes is unusual. Fever with flu-like symptoms are common but less common symptoms may be in the form of lymphadenopathy.

Figure 1: Computerized tomogram of the chest showing mass in the anterior mediastinum

Figure 2: Well-formed epithelioid granuloma with Langhans giant cells and caseating necrosis in mediastinal mass biopsy
of malaise, arthralgias, headache, vomitings, rash, etc. Systemic involvement of liver, myocardium, meninges, bone marrow, joints, eyes, etc. is not so common.[3] In this patient, there were no cervical lymph nodes initially which developed later associated with new-onset fever in spite of ATT suggesting a new disease development over preexisting TB confirmed earlier histopathologically.

Confirmation of diagnosis of Kikuchi disease is by excision biopsy of the involved lymph nodes. In this patient, the histopathology, immunohistochemistry, and negative Z-N stain for AFB, all were in favor of Kikuchi disease.

Treatment for Kikuchi disease is symptomatic and rarely may need steroids. It resolves spontaneously in about 1–4 months as happened in this case.

Etiology of Kikuchi disease is not known. Some association with certain viruses had been speculated but not confirmed. It had been hypothesized as an autoimmune phenomenon induced by virus-infected transformed lymphocytes leading to T-cell mediated immune response, sometimes to a variety of nonspecific stimuli.[6]

There were no such reports of coexisting Koch’s with Kikuchi disease found in the literature. It is not known whether it is seen more commonly when there is an ongoing lymph nodal pathology, but the autoimmune phenomenon may be more likely to develop in the inflamed regions due to previous disease, and Mycobacterium maybe acting as stimulus triggering the autoimmune response. This case illustrates the need to look at whether there is any particular association with Koch’s and whether these patients go on to develop Koch’s in the future.

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest
There are no conflicts of interest.

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