A Challenging Case of Generalized Lymphadenopathy

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INTRODUCTION:

Generalized lymphadenopathy needs a multidisciplinary approach. Our patient presented with headache, nausea, vomiting, and unsteady gait. Imaging showed numerous lymph nodes. Further diagnostics revealed a diagnosis that emphasized the need to consider broader differential diagnosis which can be masqueraded by a misleading clinical picture.

CASE PRESENTATION:

A 64-year-old female with a past medical history of hypertension, hyperlipidemia, diverticulosis, and obesity, presented to the emergency department with a stabbing headache, drowsiness, nausea, two episodes of non-bloody vomiting, and unsteady gait for 2 days. On physical examination, she only had an unsteady gait on tandem walking. Laboratory investigations were normal. CT Head did not show any acute abnormality. CT chest showed multiple solitary lung nodules bilaterally (largest-16mm) (Figure1). It also showed mediastinal, paratracheal, subcarinal, and bilateral hilar lymphadenopathy. Hemtology and Oncology was consulted given the CT Scan findings. There was a high suspicion of metastatic lymphoma, followed by tumor of unknown primary origin, HIV, and autoimmune diseases. She underwent a PET scan which revealed extensive FDG avid disease involving lymph nodes above and below the diaphragm including the right axillary lymph node, mediastinal lymph nodes – right paratracheal node, and inguinal lymph nodes. There were multiple solid nodules in the lung, subcutaneous soft tissues, right sacroiliac joint, and perineum. Flow cytometry indicated an elevated CD4:CD8 ratio seen in reactive and neoplastic conditions. Excisional biopsy showed noncaseating granulomas in the lymph node, consistent with sarcoidosis (Figures 1 and 2). She was referred to the Sarcoidosis Program and Pulmonology for further care and management,

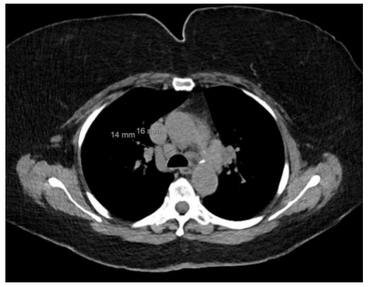

Figure 1: CT Chest showing lung nodules

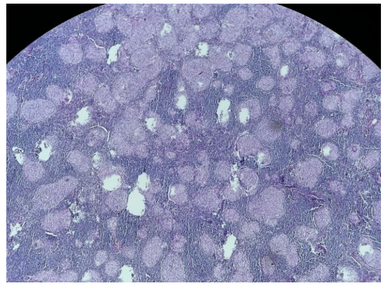

Figure 2: Excisional biopsy showing non-caseating granulomas under low resolution

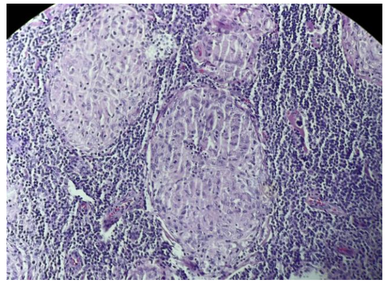

Figure 3: Excisional biopsy showing non-caseating granulomas under high resolution

DISCUSSION:

Persistent generalized lymphadenopathy warrants a thorough investigation to further evaluate the wide array of diseases like HIV, mycobacterial infections, malignancies, and sarcoidosis. The above diseases have an overlap in their clinical presentation, and this makes it challenging to narrow down to a diagnosis from the broad spectrum of differential diagnoses. Especially, since sarcoidosis can mimic lymphoma, such as in our patient.

Sarcoidosis is an inflammatory multisystem disease. The lung is the most commonly affected organ in about 90% of the cases. This is followed by skin, eye, liver, peripheral lymph nodes, and heart. However, it can affect any organ in the body or remain totally asymptomatic[1]. The diagnosis is based on clinical-histopathologic findings. The hallmark for the diagnosis is non-caseating granulomas from the affected organ system, as seen on lymph node biopsy in our patient[2].

The treatment depends on the severity and may not be required in milder cases. While, for extensive sarcoidosis, corticosteroids are the mainstay. Methotrexate, leflunomide, and azathioprine are also beneficial. Infliximab should be used as the last resort for refractory cases[3].

CONCLUSION:

Generalized lymphadenopathy is challenging and the investigation should be considered keeping broader differential diagnosis into consideration. A biopsy should be considered early in the clinical course to establish the diagnosis and initiate prompt treatment.

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