Case Report

All Lymphadenopathies are not Tubercular

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ABSTRACT:

Lymphadenopathy refers to swelling of lymph nodes. Submandibular nodes (<1 cm) are often palpable in healthy children and young adults; healthy adults may have palpable inguinal nodes of up to 2 cm, which is considered normal. Lymphadenopathy can be localized or diffuse. Lymphadenopathy may be either primary or secondary manifestation of numerous disorders such as infectious diseases, immunologic diseases, malignant diseases (hematologic or metastatic), etc. In clinical practice, more than two-thirds of patients with lymphadenopathy have nonspecific causes or upper respiratory illnesses (viral or bacterial), others are benign while <1% are malignant. Detailed medical history, clinical examination, along with the lymph node examination, routine & special investigations are done. We report 2 cases of lymphadenopathy which were diagnosed as lymphoma.

KEYWORDS: Lymphadenopathy, submandibular nodes, lymphoma, hodgkin

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INTRODUCTION:

Lymphadenopathy is a term that refers to the swelling of lymph nodes. Approximately, 75% of lymphadenopathies are localized, and around 50% of these occur in the head and neck regions.[1] Generalized lymphadenopathy is defined as involvement of ≥2 non-contiguous lymph node groups and is typically indicative of systemic disease. Localized or regional lymphadenopathy implies involvement of a single anatomic area. Persistent generalized lymphadenopathy is defined as lymph nodes of more than 1 cm in size, in 2 or more areas persisting for 3 or more months. Mostly, benign lymphadenopathies have a non-specific or a reactive etiology while others may be associated with infections.[2] Lymphadenopathy may be seen in human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS). Hodgkin lymphoma usually presents in young adults, commonly arises in cervical lymph nodes. More than two-third of the patients of non-Hodgkin lymphoma present with painless peripheral lymphadenopathy. Waxing and waning episodes of lymphadenopathy, along with other symptoms such as fever, weight loss, or night sweats, can be seen in low-grade lymphoma.

CASE REPORT -1:

A 43 years old male patient, who was a known case of schizophrenia since 20 years, presented to the hospital with complaints of cough, fever and loss of appetite since 1 month. He was taking regular medicines - tab haloperidol 5mg tds, tab promethazine 25mg tds and tab olanzapine 10mg tds for schizophrenia since 20 years. According to his mother, his appetite was reduced since last 2 years from 4 chapatti per meal (2 meals per day) to 1-2 chapattis per meal (2 meals per day). He was vitally stable, except for temperature of 100˚F and on general examination was found to have right axillary (lateral group) and

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right epitrochlear lymph node enlargement which were rubbery in consistency, multiple, discrete border, of size 1x0.5 cm and 1.2x1cm, respectively. In systemic examination, all systems were normal. Patient was started on symptomatic and supportive treatment by keeping the differentials as drug-induced lymphadenopathy vs tubercular lymphadenopathy. The investigations were done as follows, complete blood picture with peripheral smear suggestive of microcytic and hypochromic anemia with reactive thrombocytosis. The fine needle aspiration cytology (FNAC) was done which showed clusters of lympho-histiocytes group of cells with entangled atypical cells. There were scattered large atypical cells seen with scant to moderate pale cytoplasm enlarged nucleus, granular chromatin and prominent nucleus. Focally binucleated, multilobulated *'Reed Sternberg like cells'* were also noted with close differential diagnosis of Hodgkin's Lymphoma. Patient was advised biopsy and was referred to higher oncology center for further management but. The patient did not come for any follow-up.

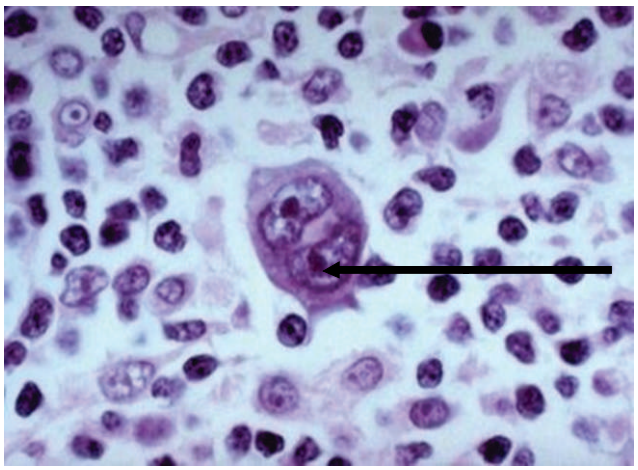

Figure : This photograph of histopathological slide shows:- Scattered large atypical cells with scant to moderate pale cytoplasm enlarged nucleus, granular chromatin and prominent nucleus. Focally binucleated, multilobulated Reed Sternberg like cells are also noted (arrowed).

CASE REPORT - 2:

A 55 years old male patient came with a complaint of painless swellings below the jaw and in front of the ears bilaterally since 4 months. These swellings were initially of pea size which gradually progressed to current size. There was no discharge. There was no history of fever, weight loss, cough, loss of appetite, no promiscuous behaviour and no history of drug intake. He was a chronic smoker. He was vitally stable and on general examination was found to have right and left submandibular lymph node enlargement which were firm in consistency, discrete border, and measured 2x1.5cm and 2.5x1.9 cm, respectively. Right and left pre-auricular lymph node enlargements were firm in consistency, discrete border, and measured 1x0.5cm and 1x1.5cm, respectively. In systemic examination, all systems were normal. Patient was started on symptomatic and supportive treatment by keeping the following differentials in mind like immunocom-promised status as vs tubercular lymphadenopathy. Patient's sample was sent for all routine investigations and HIV test. He was non-reactive for HIV. FNAC showed scattered monomorphic atypical, lymphocytes (High N: C ratio) mixed with variable cells including macrophage and histiocytes; this was suggestive of lympho-proliferative neoplasm possibly Non-Hodgkin's Lymphoma. Patient was advised biopsy and was referred to higher oncology center for further management. The patient did not came for follow-up.

DISCUSSION:

Solid tumors of the immune system are Lymphomas and they include 14% of all head and neck malignancies.[3] Hodgkin's lymphoma (HL) is a malignancy of mature B lymphocytes. It represents ~ 10% of all lymphomas diagnosed each year. The majority of HL diagnoses are classical HL (cHL), but there is a second subtype of HL, nodular lymphocyte-predominant HL (NLPHL). A bimodal distribution of age at diagnosis has been observed, with one peak incidence occurring in patients in their twenties and the other in those in their eighties. Typical presentations - most patients with cHL present with asymptomatic lymphadenopathy or a mass on chest radiograph. Pel-Ebstein fever is a rare condition reported in patients with HL, characterized by cyclic fevers that rise and fall every one or two weeks. B symptoms are found and they are formally defined as follows: Fever with persistent temperature >38°C (>100.4°F), sweats (presence of drenching night sweats), and weight loss (unexplained loss of >10 percent of body weight over the past six months). The diagnosis of HL is established by review of an adequatebiopsy specimen by an expert hematopathologist.[4] Non-Hodgkin's lymphomas (NHL) are cancers of mature B, T, and natural killer (NK) cells. They were distinguished from Hodgkin's lymphoma (HL) upon recognition of the Reed-Sternberg (RS) cell and differ from HL with respect to their biologic behaviour. The investigations should include a complete blood count, routine chemistries, liver function tests, and serum protein electrophoresis to document the presence of circulating monoclonal

paraproteins. Lymphoma histopathology and clinical presentation dictate which imaging studies should be ordered. Chest, abdominal, and pelvic computed tomography (CT) scans are essential for accurate staging to assess lymphadenopathy for indolent lymphomas, whereas positron emission tomography (PET) using 18F-fluorodeoxyglucose (FDG-PET) is useful for aggressive lymphomas. The management of NHL affecting head and neck relies on the Ann Arbor staging by an expert hemato-oncologist.[5]

Singh Rohit et al reported that, cervical lymphadenopathy is the most frequent head and neck presentation in NHL characterized by multiple painless nodes. These lesions are not as hard as metastatic nodules and are not fixed to either skin or the deep planes.[6] In our case, along with cervical lymphadenopathy we found preauricular lymphadenopathy also.

Andrea Gallamini et al found that, HL clinical presentation typically starts with lymph node enlargement, in absence of any subjective symptom or other concomitant clinical signs. Patients seek medical advice because of an enlarged, painless, palpable lymph node, which sometimes shows spontaneous fluctuations of size, more frequently in the upper or lower cervical area (60% of the cases). Other less frequently involved areas are mediastinal (20%), inguinal (7%), axillary (5%) and other (8%).[7] In our case, we did not find cervical lymphadenopathy, instead we found right axillary (lateral group) and right epitrochlear lymphadenopathy. This presentation is quite rare. FNAC was carried out. In the first case prominent Reed Sternberg cells were observed. This cell is characteristic of Hodgkin's disease.[8]

CONCLUSION:

We conclude that in patients with lymphadenopathy, the patient's age along with a detailed medical history, drug history and clinical examination are essential, for the proper further work-up including laboratory tests, radiological modalities, and tissue diagnosis, to clinch the final diagnosis. The lymphomas can have diverse kind of presentation so along with medical history the fine needle aspiration and tissue study play an important role.

Declaration of patient consent:-

The authors certify that they have obtained all appropriate patient consent for his/her/their images and other clinical information to be reported. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity.

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Conflicts of interest
There are no conflicts of interest.

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