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CASE REPORT OPEN ACCESS

Silent Swellings, Loud Diagnosis: Hodgkin Lymphoma Hidden in the Axillae

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ABSTRACT

We report a rare case of a 28-year-old male presenting with bilateral axillary lymphadenopathy persisting for nine months, accompanied by low-grade fever and loss of appetite. Initial fine-needle aspiration cytology (FNAC) suggested granulomatous lymphadenitis. However, subsequent excisional biopsy confirmed classical Hodgkin lymphoma. Immunohistochemistry (IHC) revealed a diagnosis of nodular lymphocyte predominant Hodgkin lymphoma, type C. PET-CT showed hypermetabolic lymphadenopathy on both sides of the diaphragm.
This case underscores the importance of considering Hodgkin lymphoma in the differential diagnosis of isolated axillary lymphadenopathy and the potential for misdiagnosis when relying solely on FNAC.

Keywords: Hodgkin Lymphoma, Axillary Lymphadenopathy, Granulomatous Lymphadenitis

INTRODUCTION:

Hodgkin lymphoma (HL) typically presents with painless cervical or mediastinal lymphadenopathy. Isolated axillary involvement without other nodal or systemic manifestations is uncommon and can lead to diagnostic delays. Moreover, HL can exhibit granulomatous reactions, further complicating the diagnostic process[1].

CASE PRESENTATION

In the absence of classical symptoms or mediastinal disease, bilateral axillary swellings might quietly suggest an infection, until histology speaks louder. Here, we present an uncommon case of Hodgkin lymphoma whose only signal was found in the axillae.
A 28-year-old male presented with bilateral axillary swelling of nine months' duration, progressively increasing in size, more pronounced on the left side. He reported low-grade fever and loss of appetite but denied weight loss, night sweats, or other systemic symptoms. There was no significant past medical history, including tuberculosis or COVID-19.

Physical examination revealed firm, non-tender, mobile lymph nodes in both axillae, with the largest measuring approximately 4-5 cm on the left. No other lymphadenopathy or organomegaly was noted.
Laboratory investigations were unremarkable. Chest X-ray (Figure 1) showed soft tissue density in the left axilla with clear lung fields; no evidence of calcification, bony lesions or mediastinal changes.

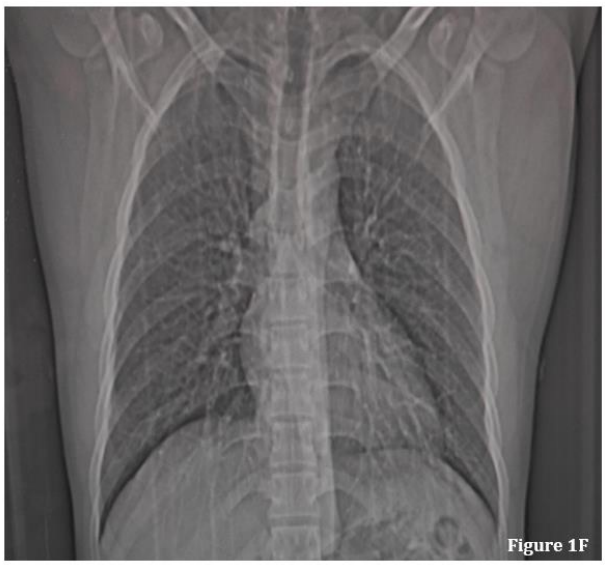


Figure 1F

Contrast-enhanced computed tomography (CECT) of the thorax demonstrated bilateral enlarged axillary lymph nodes (Figure 2, 3) exhibiting post-contrast homogeneous enhancement (Figure 4, 5). The largest lymph node, located in the left axilla, measured approximately 5 × 7 cm (Figure 5). There was loss of normal fatty hilum, more pronounced on the left side. Importantly, there was no evidence of necrosis, mediastinal lymphadenopathy, pulmonary consolidation, cavitation, or pleural effusion.

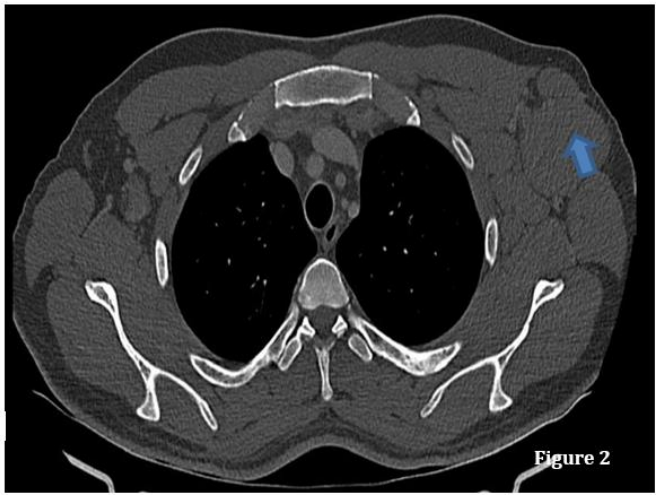


Figure 2

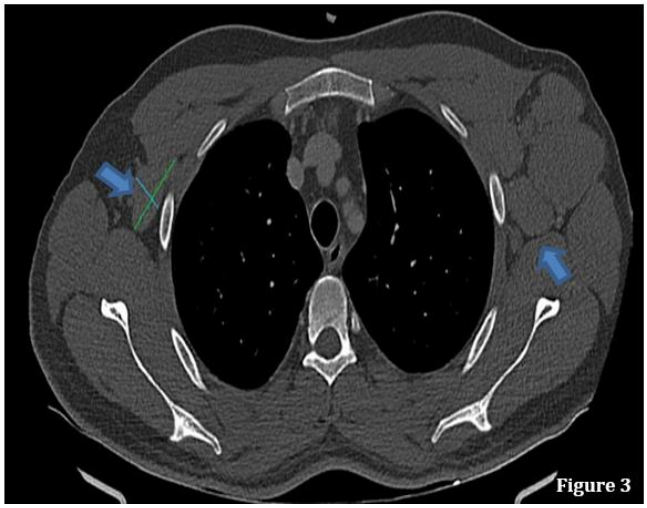


Figure 3

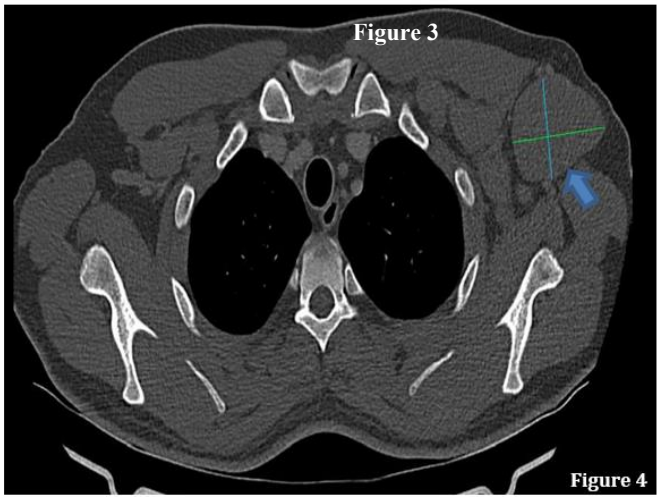
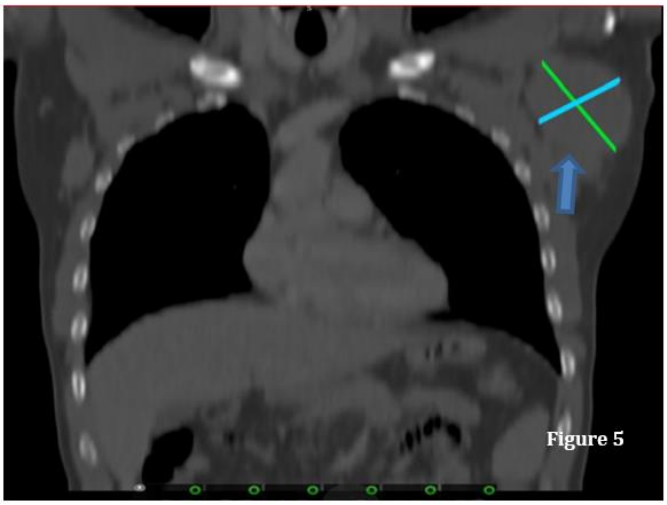
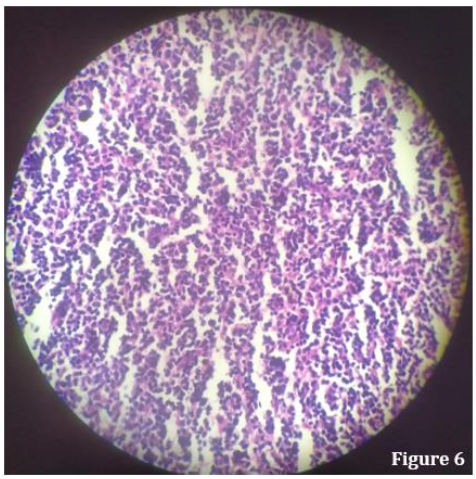
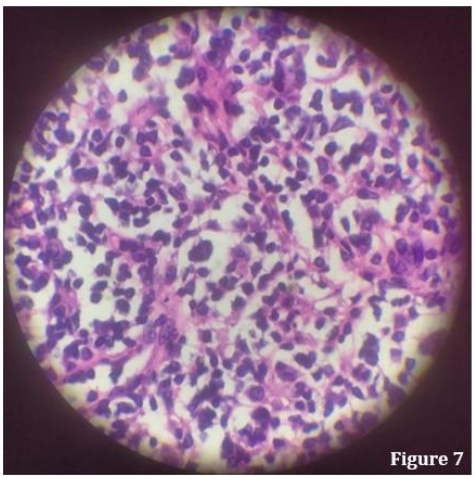


Figure 4



FNAC of the left axillary lymph node revealed granulomatous lymphadenitis. Given the persistent lymphadenopathy and inconclusive FNAC results, an excisional biopsy was performed. Histopathological examination showed Lymph node architecture is completely effaced by a diffuse infiltrate of malignant lymphoid cells. Cells are small with hyperchromatic nuclei, granular chromatin, and scant cytoplasm. Capsule is thinned with extracapsular spread. (Figure 6 & 7). Occasional popcorn-like Reed-Sternberg cells are noted.(Figure 8)





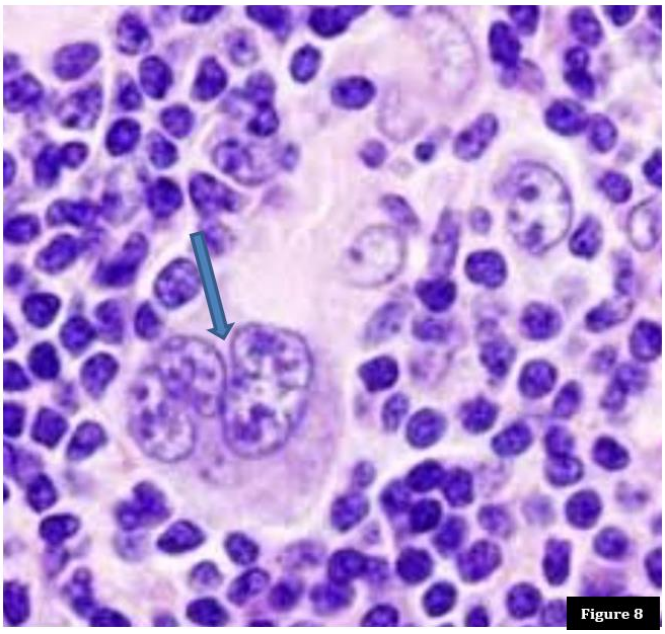


Figure 8

Immunohistochemistry (IHC) further demonstrated that the atypical large neoplastic cells were positive for CD20 and PAX5, with LCA positivity. Additional markers such as Bcl6, BOB1, OCT2, and CD79a were also expressed, supporting the diagnosis of nodular lymphocyte predominant Hodgkin lymphoma, type C.

PET-CT scan findings revealed FDG-avid bilateral axillary lymph nodes (left measuring 2.6 x 1.5 cm, SUV max 18.2) and deep pectoral lymph node involvement, confirming hypermetabolic lymphadenopathy on both sides of the diaphragm.

DISCUSSION

Hodgkin lymphoma (HL) is a B-cell lymphoproliferative malignancy most commonly affecting young adults. It typically presents with painless cervical lymphadenopathy and, in many cases, involves the mediastinum. Isolated axillary lymph node involvement without evidence of other lymphadenopathy, systemic symptoms, or pulmonary lesions is rare and diagnostically challenging. In our case, the patient presented with bilateral axillary swelling, which had been progressing over nine months without any prior history of tuberculosis, COVID-19, or malignancy.

A key pitfall in this case was the initial FNAC report, which revealed granulomatous lymphadenitis, a finding often associated with tuberculosis or sarcoidosis. While granulomas are commonly attributed to infectious or autoimmune causes, they can also occur as a reaction in lymphomas, including Hodgkin lymphoma. This is particularly true for the nodular sclerosis subtype, where granulomatous inflammation can obscure the classic diagnostic features[1], including Reed-Sternberg (RS) cells. Therefore, granulomas in cytology should not exclude malignancy[1], especially when lymphadenopathy is persistent, progressive, or unresponsive to empirical treatment.

The absence of mediastinal or hilar lymphadenopathy on CECT thorax further added to the diagnostic ambiguity. Though classical HL frequently involves mediastinal lymph nodes, peripheral nodal involvement (especially axillary) without thoracic disease has been reported, albeit rarely. Moreover, bilateral axillary involvement mimicking reactive or infectious etiology has been documented[2] in the literature. According to Mauch et al., isolated nodal involvement outside the cervical and mediastinal regions, such as axillary nodes, **occurred in less than 3% of Hodgkin lymphoma cases**, highlighting the rarity of presentations limited to bilateral axillary lymphadenopathy[3]. It often leads to delays in definitive diagnosis due to over-reliance on cytology.

FNAC, while useful for initial screening, lacks architectural detail and may miss diagnostic RS cells, especially in early or granulomatous-rich lesions. Thus, excisional biopsy remains the gold standard for evaluating chronic, unexplained lymphadenopathy, particularly when FNAC findings do not align with clinical suspicion. In our case, the excisional biopsy revealed features consistent with classical HL, including RS cells in a background of lymphocytes and eosinophils, confirming the diagnosis.

Another relevant aspect is the importance of clinicopathological correlation. While granulomatous inflammation often steers clinicians toward infectious diseases like tuberculosis especially in endemic regions like India. HL should remain a

strong differential in young patients with systemic symptoms such as anorexia, low-grade fever, and persistent lymphadenopathy[4]. Early misdiagnosis or delayed diagnosis can lead to disease progression and delayed initiation of chemotherapy.

In summary, this case highlights the importance of maintaining a high index of suspicion when interpreting granulomatous lymphadenitis, especially in chronic or atypical lymphadenopathy. Hodgkin lymphoma can deceptively mimic benign conditions, even when imaging and cytology fail to confirm malignancy. A multidisciplinary approach integrating clinical judgment, radiologic insights, and histopathological confirmation is vital for timely and accurate diagnosis.

Learning Points

- Hodgkin lymphoma can present as isolated axillary lymphadenopathy without systemic symptoms or other nodal involvement.
- Granulomatous inflammation on FNAC does not rule out malignancy and may be seen in Hodgkin lymphoma.
- Excisional biopsy remains the gold standard in evaluating unexplained, persistent lymphadenopathy.
- Clinical suspicion should remain high when lymphadenopathy persists or progresses despite inconclusive initial workup.
- A multidisciplinary approach, combining clinical findings, imaging, and histopathology, is essential for accurate diagnosis.

REFERENCES

1. Du J, Zhang Y, Liu D, Zhu G, Zhang Q. Hodgkin's lymphoma with marked granulomatous reaction: a diagnostic pitfall. Int J Clin Exp Pathol. 2019;12(7):2772–2774.
2. Ogawa T, Hayashibara N, Tsuji E, et al. Profiles of axillary lymphadenopathy without breast lesions: An analysis of 62 patients who underwent axillary lymph node biopsies. Clin Surg. 2018;3:2005.
3. Mauch PM, Kalish LA, Kadin M, Coleman CN, Osteen R, Hellman S. Patterns of presentation of Hodgkin disease: implications for etiology and pathogenesis. Cancer. 1993 Mar 15;71(6):2062–2071. doi:10.1002/1097-0142(19930315)71:6<2062::AID-CNCR2820710622>3.0.CO;2-0
4. Bahniwal R, Inayet N, Johnston M, Moen S. Granulomatous mimicry: Sarcoidosis masking Hodgkin lymphoma. Chest. 2023;163(1):e7–e10. doi:10.1016/j.chest.2022.08.2162