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Research Article

TUBERCULOSIS OF BILATERAL AXILLARY LYMPH NODES MIMICKING HIDRADENITIS SUPPURATIVA

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A R T I C L E I N F O

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A B S T R A C T

Background: Hidradenitis Suppurativa (HS) is a chronic inflammatory disorder primarily affecting the apocrine gland-bearing regions, notably the axillary, inguinal, and anogenital areas. Its clinical presentation involves painful inflammatory lesions that can mimic other conditions. Axillary tuberculosis (TB) is rare, affecting approximately 3% of tuberculous lymphadenitis cases. **Case Presentation:** We describe a case of a 32-year-old male presenting with bilateral axillary swellings and discharging sinuses, clinically suggestive of HS. Despite the clinical suspicion, cytological examination confirmed tuberculosis of the lymph nodes, rather than HS. The patient had no prior TB history but was a daily hookah smoker. **Discussion:** The presentation of isolated axillary TB without evident systemic TB signs complicates diagnosis, especially when clinical features overlap with HS. Our patient's clinical and radiological findings initially leaned towards HS. However, cytology confirmed TB, highlighting the diagnostic challenge. Differentiating between these conditions is crucial given their distinct treatment approaches and prognosis. **Conclusion:** Bilateral axillary TB misdiagnosed as HS is uncommon but essential to consider, especially in TB-endemic regions like India. Clinicians must maintain a high index of suspicion for TB to ensure timely diagnosis and appropriate management, avoiding potential complications.

INTRODUCTION

Hidradenitis Suppurativa is a multifactorial, chronic inflammatory disorder which affects hair follicles and is more common in genetically susceptible individuals which can be exacerbated by environmental factors including smoking and obesity.[1]It affects the pilosebaceous follicle, associated with acne conglobata, pilonidal sinus, and scalp cellulitis, thus defining a tetrad. It affects 1 to 2% of the population, among females.[2]The apocrine gland-bearing portions of the body can have deep-seated, painful inflammatory lesions; they are most frequently observed in the axillary, inguinal, and anogenital regions.[3,4] The initial lesion is nodular, abscessed, followed by fistulized, localized, or diffuse lesions.[5]It mainly occurs among young patients with hyper seborrhoea. Isolated axillary tuberculosis (TB) is rare and sometimes creates diagnostic difficulty. The axillary lymph nodes are affected in around 3% of tuberculous lymphadenitis.[6]We report a case of a young male patient who presented with bilateral axillary swellings with discharging sinuses, clinically suspected to be hidradenitis suppurativa and was later diagnosed as tuberculosis of lymph node on cytology.

CASE REPORT

A 32-year-old male patient presented with multiple swellings in bilateral axilla since last 5 years gradually progressing in size, associated with pain since last 2 years and intermittent pus like discharge from swellings since last 6 months. The patient had no history of chronic cough with expectoration. There was no history of loss of appetite or loss of weight. The patient had no previous history of TB or exposure to TB. Patient was non-alcoholic. He used to smoke hookah daily since last 4 years. On physical examination, the patient was well built and nourished with no evidence of pallor, icterus, cyanosis, clubbing, and pedal oedema. On local examination, multiple non-mobile and non-tender swellings were palpated largest measuring 2×2 cm on left side and 0.5×0.5 cm on right side with superficial pus discharging sinuses. Few healed lesions were also present in bilateral axilla. Routine blood investigations such as complete blood count, renal function test, and liver function test were normal. Serological investigations of HIV 1 and 2, as well as Hepatitis B and C, were negative. Chest Xray showed multiple, calcified, axillary lymph nodes in bilateral axilla.

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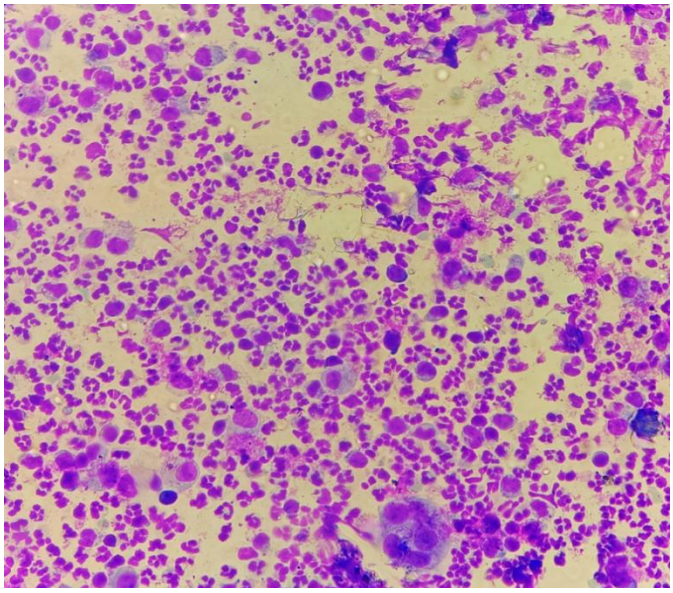
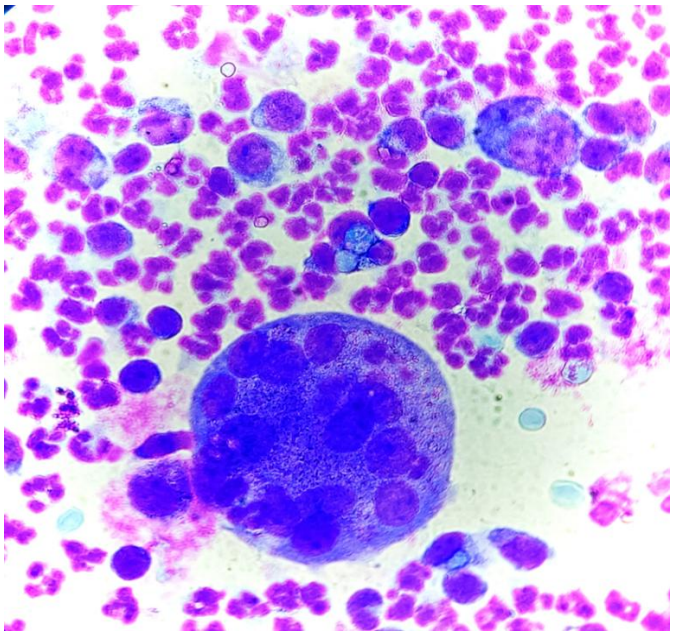
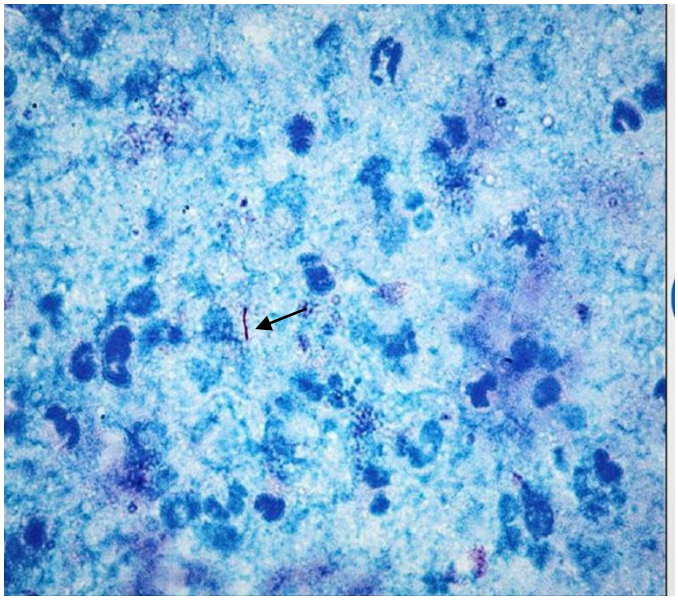


(Fig.1- H & E stain, 40x) Microphotograph shows inflammatory cells comprising neutrophils, giant cells and lymphocytes against necrotic background



(Fig.2- H & E stain, 100x) Microphotograph shows giant cell, neutrophils, lymphocytes

Ultrasound of the right axilla showed a mild subcutaneous oedematous inflammatory pocket with a hypoechoic collection of depth 0.3 cm, while the ultrasound of the left axilla showed a subcutaneous oedematous inflammatory pocket with a hypoechoic collection of depth 1.0 cm. The Mantoux test revealed no induration after 72 hours. Fine-needle aspiration from the bilateral axillary swelling yielded pus. Giemsa-stained smears examined showed inflammatory cells comprising neutrophils, macrophages, giant cells, and a few lymphocytes against a necrotic background. Ziehl-Neelsen staining for acid-fast bacilli with 20% H_2SO_4 was positive, suggestive of tubercular inflammation.



(Fig.3- ZN stain, 100x) Microphotograph shows ZN stain positive for acid fast bacilli (←)

DISCUSSION

In underdeveloped and developing nations, tuberculosis is among the most prevalent infectious diseases which can affect any organ in the body. Tuberculous lymphadenitis is the most frequent type of extrapulmonary TB.[7]The lymph nodes that are affected by tuberculous disease are the cervical, supraclavicular, axillary, mesenteric, porta hepatis, perihepatic, and inguinal.[6] The cervical lymph node is impacted by tuberculous lymphadenitis more frequently than other regional lymph nodes.[8]Three percent of tuberculous lymphadenitis cases involve the axillary lymph nodes. It is uncommon to have isolated axillary tuberculous lymphadenitis without concurrent signs of tuberculosis elsewhere in the body. Axillary tuberculous lymphadenitis is more prevalent in girls between the ages of 15 and 30.[9] Its greater prevalence on the left side is its second noteworthy characteristic. The lymphatic supply of the left upper limb or direct contact with the thoracic duct could be the cause.[10] In our case the clinical features and radiological findings were in favor of hidradenitis suppurativa.

Hidradenitis can cause reactive lymphadenopathy, super-infection, and inflammation and fibrosis of surrounding tissues when it affects the pilosebaceous follicle. Conversely, axillary lymphadenopathy is the first setting for lymph node tuberculosis, which then progresses to cutaneous fistulization and may result in superinfection and secondary fibrosis[11].Suppuration and inflammation can transform from one entity to another; that is, lymph node tuberculosis may originate from the adenopathy and then travel to the skin, or the reactive adenopathy (hidradenitis) can occur on the skin.It could create more uncertainty if the transition to chronicity is the result of a postponed diagnosis or outbursts during treatment. This means that the final clinical presentation is the same. The clinical facts and context allow us to make a difference. A clinician can promptly diagnose such patients as axillary hidradenitis, which is characterized by a persistent axillary suppuration and numerous pus-discharging sinuses[5]. The endemic nature of scrofuloderma, or lesions of cutaneous

tuberculosis, should also be kept in mind in a country like India with high prevalence of tuberculosis. This ambiguity prompts us to perform a thorough clinical examination and exact questioning in search of any indications that might suggest an etiology for this conflicting clinical appearance.

CONCLUSION

Hidradenitis Suppurativa is the foremost differential diagnosis which comes into mind when a patient presents with chronic suppurative sinuses in bilateral axilla. Bilateral axillary tuberculosis presenting as pus discharging sinuses is very rare. But it should always be kept in mind in endemic countries like India to avoid unnecessary delay in diagnosis and treatment of a curable disease.

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