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Cold Abscess mimicking Goitre.

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Abstract:

Soon after Tuberculosis is worldwide health problem, especially in south Asia and Africa. It commonly affects lung, but extra-pulmonary Tuberculosis (TB) is also common. Most common extra-pulmonary tuberculosis present as cervical lymphadenopathy (enlarge cervical lymph nodes, mostly matted, various consistency, induration and cold abscess and sinuses). The present case is a very rare presentation of primary tuberculous cervical lymphadenopathy, the young patient present with tuberculous (TB) cold abscess in burns space only, no other lymph nodes enlarge and no other signs and symptoms of TB.

Keywords: Tuberculosis, Cold Abscess, Tuberculous lymphangitis.

Introduction:

Cold abscess is a localized collection of pus that does not stimulate acute inflammation, usually caused by Mycobacterium Tuberculosis (TB). Initial lesions of TB usually occur in lungs. Extra-pulmonary TB is rare and accounts for about 7-30 % of TB cases¹. Lymph adenitis is the most common clinical presentation of extra-pulmonary TB²; it can be the local manifestation of the systemic disease. Cervical lymph nodes are the commonest site for tuberculous lymph adenitis, followed by mediastinal, axillary, mesenteric, hepatic portal, peri-hepatic and inguinal lymph nodes in frequency³. Cervical lymph adenitis TB may present in concurrence with pulmonary TB or may present primarily without pulmonary involvement. Later situation may pose a difficulty in diagnosis due to absence of systemic signs and symptoms. X-Ray chest is necessary to rule out pulmonary TB.

Tuberculosis is a worldwide health problem. According to world health organization (WHO) tuberculosis is the cause of death of approximately 2 million peoples each year⁴. High incidence of TB is seen in region of Indian subcontinent (India, Pakistan, Bangladesh), Southeast Asia and Africa⁵. Pakistan rank among first ten countries with highest burden of TB⁶. Tuberculosis is also predominated cause of cervical lymphadenopathy in Pakistan⁷.

Important finding of TB cervical lymphadenitis includes multiplicity, matting and caseation. In up to 57% of patients have no systemic symptoms (low grade fever, weight loss and fatigue etc.). Cough is not a prominent feature of TB lymph adenitis.

Here we are presenting a healthy 33-year-old Pakistani male, having cold abscess, in burns space (supra sterna area), with no evidence previous active lung TB and also having no evidence of TB elsewhere in the body

Case Report:

A 33-year-old male Pakistani reported to outpatient Surgery clinic of Liaquat University Hospital Hyderabad Pakistan. He was complaining of painless swelling in his neck anteriorly, just above sternal notch (Burns space) for 8 months. The swelling was initially small in size (1x1cm), firm in consistency, mobile and painless. It slowly and progressively enlarges and become soft. He has no history of fever, weight loss, and loss of appetite. He also has no cough and no swelling elsewhere in body, have no significant past medical history. Occasionally he smokes cigarette. On examination patient look healthy, average built, having 9x6 cm size spherical swelling in burns space, overlying skin was same as vicinity (figure-1). No sign of inflammation was seen. The swelling was non-tender, cystic, fluctuant, non-compressible, no other

cervical axillary lymph nodes were palpable except on slight right of swelling small lymph node palpable.



Fig No. 1: Clinical Presentation

Patient was investigated, X-Ray chest shows clear lung field. In complete blood count, hemoglobin was 13.2 g/dl, white blood cell $6.2 \times 10^3 \mu\text{l}$, lymphocytes 36.5%, Neutrophil 54%, ESR was 42 mm in 1st hour. Hepatitis B and C and HIV viruses screening was negative. Ultrasound shows swelling contain fluid, and on its right small peanut size mass (lymph node) slightly deep of swelling. Fluid was aspirated, that was pus, and sent for culture and for acid fast stain. Both were negative for mycobacterium TB. FNAC of lymph node was carried out under ultra sound guidance; result shows giant cells, and necrotic tissue. Material from FNA (fine needle aspiration) was also sent for Zeihl-Neelsen staining and acid fast bacilli were detected. Tuberculin test was intermediate (9mm).

According to patient clinical presentation and investigations, diagnosis of tuberculous cold abscess was made, and the patient was referred to TB clinic, for proper treatment. He was treated there for nine months, and followed up to one year in surgical clinic, no complication was seen and patient needed no further surgery.

Discussion:

Tuberculosis is the common cause of cervical lymphadenopathy in Pakistan ^{8, 9}. TB cervical lymphadenopathy usually present as, enlarge cervical lymph nodes in anterior or posterior triangle, which are usually multiple, and matted, may be unilateral or bilateral, usually firm in consistency, but because of caseation and cold abscess become soft and having various consistency from soft to firm, overlying skin may become indurated, pigmented and sinus may develop, to drain cold abscess (color stud). Also, patients have systemic signs and symptoms like, fever, cough,

night sweat, weakness, weight loss etc. In our case patient have only cold abscess and one cervical lymph node in burns space enlarged, patient have poor socio-economic condition but look healthy, no systemic signs and symptoms present, therefore present some difficulty in diagnosis. The investigations, like ultrasound of swelling, Chest X-Ray, ESR, FNAC, Tuberculin test made the diagnosis easy. PCR is also a useful test, not done in our case.

Histopathological examination of fine needle aspiration of swelling was an importantly helpful in the diagnosis, because of the presence of granulomatous lesion with epithelioid cells, was highly suggestive of TB. The detection of mycobacterium was negative in almost 50% of the culture, and smear performed.

Primarily tuberculous of cervical lymphadenopathy is commonly present in children and adolescent ¹⁰. In our case patient was adult with poor socio-economic condition.

Conclusion:

When systemic signs and symptoms are absent, as in our case, it is difficult to diagnose Tuberculosis Cervical lymphadenopathy. Physicians and Surgeons should aware about this rare type of presentation, that would make the diagnosis of TB easier, and in early stage. It makes management easy.

of pandemic and disease, stress plays a significant role in affecting the mental health of people. Therefore, it is really important for

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