

Tuberculous Cold Abscess Case Report: An Unusual Presentation

¹Dr. Ashwani Rana, MD Dermatology Civil Hospital, Joginder Nagar, Mandi, H.P. India

²Dr. Jeevan Kumar, MS Surgery, Civil Hospital, Joginder Nagar, Mandi, H.P. India

Corresponding Author: Dr. Jeevan Kumar, MS Surgery, Civil Hospital, Joginder Nagar, Mandi, H.P. India

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Abstract

Tuberculosis of the soft tissues secondary to underlying bone involvement is not uncommon, but selective tissue involvement without bony abnormality is rare. Tuberculosis is considered as ubiquitous disease as it involves any organ, but primary involvement of abdominal muscles is very rare. We present a case in which two tubercular abscesses with no underlying bony involvement, simulating a pyogenic abscess.

Keywords: TB, HIV, CBNAAT

Introduction

Tuberculosis (TB) continues to be a common cause of infectious disease afflicting up to one-third of the world’s population [1]. The incidence of primary muscular tuberculosis was reported as 0.015% by Petter [2]. Tuberculosis affects a significant percentage of the world’s population, and musculoskeletal tuberculosis constitutes 1 - 5% of all cases [3].

TB can involve the soft tissues by extension from bone, synovial lining of joints or tendon sheaths; by direct inoculation; and, rarely, by haematogenous dissemination [4].

The common organs of involvement are the lungs, kidneys, bones, and gastrointestinal tract. The varied manifestations seen in tuberculosis are because of the

difference in the number and virulence of bacilli, the routes of infection and the host’s immune status.

Tuberculosis of the soft tissues, in the form of conditions such as tubercular bursitis, tubercular synovitis and tubercular spondylitis secondary to underlying bone involvement, is not uncommon [3, 5].

Case Report

A 27-year-old male presented to outpatient department of surgery with a painless, gradually increasing swelling over anterior abdominal wall and over the anterior lower chest for the last two years. There is history of mild pain over the anterior chest swelling while the abdomen swelling is painless. Patient have no history of fever; night sweats.

There were no other symptoms and the patient did not have any other past medical history suggestive of tuberculosis.

Physical examination revealed two discrete swellings one measuring 3×4 cm and situated in the midline area of anterior chest wall and other measuring 8 cm × 7 cm on the anterior abdominal wall to right of midline which extended from right hypochondrium above to the right lumbar region below.

The swellings were non-tender, mobile, superficial and without any discharging sinus. The abdomen wall

swelling failed to disappear while making the abdominal muscle taut. There was no associated lymphadenopathy and systemic examination was normal. Routine blood and urine examinations were normal. Chest radiograph and urine examinations were normal. Chest radiograph and blood chemistry including human immunodeficiency virus (HIV) test did not reveal any abnormality. Montoux test found to be strongly positive with cross-sectional (horizontal) induration of 16 mm.

Ultrasonography Scan of abdominal swelling revealed a well-defined heterogeneously hypoechoic cystic lesion of size 11×4.1×10.7 cm in abdominal parietal wall (predominantly cystic) of mixed echogenicity in right upper quadrant. Incision and drainage of anterior chest wall swelling done and aspirated content was sent for CBNAAT and found to be positive for tuberculosis. The patient was diagnosed to have multiple tubercular cold abscess. Patient responded favourably to anti-tubercular drugs and surgical drainage.



Figure 1: Swelling in anterior chest wall and anterior abdominal wall

Discussion

Tuberculosis can involve the soft tissues by extension from bone, synovial lining of joints or tendon sheaths; by direct inoculation; and, rarely, by haematogenous dissemination [4].

Skin fistulization is rare and is often observed in case of delayed treatment, which is not the case of

scrofuloderma, which represents the clinical form of cutaneous satellite cutaneous disease with nodal or primary osteoarticular focus [6]. Skeletal muscle involvement occurs in two forms: Most commonly the tubercular abscess spreads into the muscle through extension from the neighbouring structures like lymph nodes, bone, joint or tendon, etc. [7].

In most series, the combination of surgery and anti-tuberculosis treatment is recommended, preferably to reduce the risk of recurrence and the surgical procedure is essentially based on the obliteration of the residual cavity after flattening of the cold abscess and on the removal of all the infected tissues, including the affected ribs or cartilage segments [8-10].

Declaration of Patient Consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/ their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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