

CASE REPORT

Tuberculous abscess masquerading as post IM injection gluteal abscess

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ABSTRACT

Reporting an unusual case of tuberculous abscess masquerading as post intramuscular injection gluteal abscess. A 66year old gentleman with pain and swelling in right gluteal region since one and half month following intramuscular injection underwent incision and drainage of right gluteal abscess. Pus sample was positive for MTB on line probe assay. He was thus started on antitubercular therapy as per NTEP.

Keywords: tuberculosis, soft tissue abscess, intramuscular injection

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INTRODUCTION

Tuberculosis is a major health problem in India. Soft tissue tuberculosis is a relatively rare form of extrapulmonary tuberculosis. Mycobacterium tuberculosis infections rarely affect the skin or soft tissues. However, in areas where tuberculosis is endemic, identifying Mycobacterium tuberculosis is always an essential part of the differential diagnosis for the association of the skin and soft tissues. The uncommon signs are frequently misdiagnosed, which might cause appropriate treatment to be delayed. A tubercular abscess is an unusual type of tuberculosis that can occur in various parts of the body. Most of reported cases are attributed to use of a contaminated needle/ syringe and lack of aseptic measures while administration. Even though IM injections are a minor procedure, needs asepsis and appropriate administration technique to prevent rare but serious complications.

CASE REPORT

A 66y/m from north India reported with chief complaints of pain and swelling over right gluteal region since one and a half months. As there was no response to home remedies he was brought by his son to hospital for further management. History of right gluteal intramuscular injection one and a half month back for fever at peripheral hospital; following which he developed pain and swelling. He is a known case

of diabetes mellitus since 4yrs and on medication for same. There is No h/o fever/weight loss/ loss of appetite.

Local examination:

Swelling of 20*18*8 cm extent in the upper outer quadrant of right gluteal region. Local rise of temperature present. Firm in consistency. Tense, tender and localised swelling. No regional lymphadenopathy.

Investigations: suggestive of poorly controlled diabetes mellitus

Lab reports:

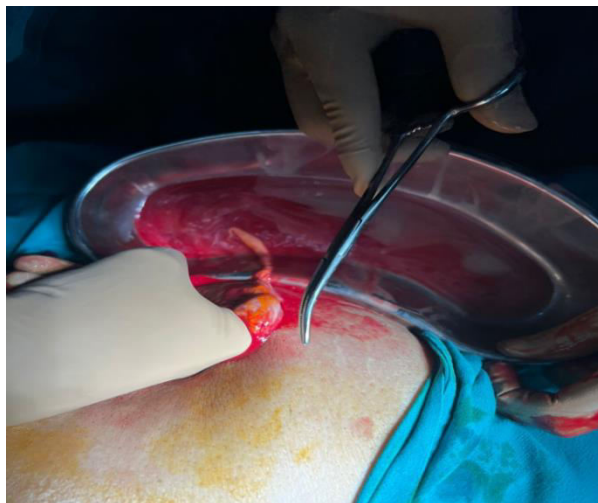
HB-10.6	Na-135
WBC-7.32.	k-4.1
PLT-220.	cl-104
HBA1c-8.3.	creat-0.70
RBS-328.	HHH-negative

All other lab values within normal limit.

Regional usg revealed abscess of 384cc ill defined anechoic to hypoechoic collection with dense internal moving echoes within the intermuscular/intramuscular plane In the upper outer quadrant of the right gluteal region.

Xray PBH was unremarkable.

After complete workup he underwent incision and drainage of right gluteal abscess. Intraop Approx 500cc of pus drained and sent for culture and sensitivity, AFB, MGIT and line probe assay.



Culture sensitivity of pus: organism isolated-*Pseudomonas aeruginosa* and started on antibiotic according to sensitivity.

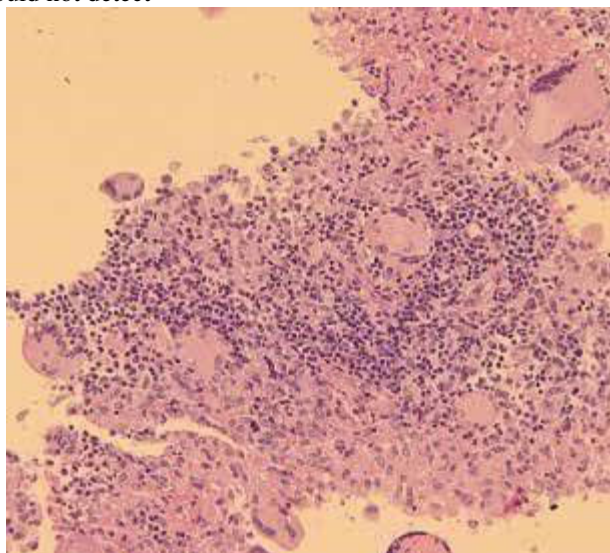
Wound did not heal despite regular dressing.

AFB/ZN(STAIN): could not detect

MGIT:

MTB

TB MDR SCREEN (LPA): Mtb detected, rifampicin and isoniazide resistance not detected



DISCUSSION

Afb smear is microscopic examination of fluorochrome stain of a specimen. This provides only presumptive diagnosis.

Advantages: rapid, easy to perform and cheaper.

Disadvantages: less sensitive than culture, detection limit 10,000 bacilli/ml of sputum, cannot determine the viability of bacilli, inability to discriminate between mycobacterial species.

Sensitivity 38%. Specificity 96.7%

Time required 24 hours

Line probe assay (lpa) is probe based detection of amplified DNA in specimen.

Use of lpa in TB diagnostics: identification of MTB complex, Detection of resistance of anti-tubercular drugs-1st and 2nd line, Speciation of Mtb complex and NTM (nontuberculous mycobacteria).

Limitation: can be performed only on positive cultures or smear positive clinical specimens.

Sensitivity 96.5%. specificity 99.5%.

Time required 24-48 hours.

Afb culture: Gold standard for diagnosis. Can detect as few as 10 viable bacilli per milliliter of sample. Distinguishes even between individual members of MTBC by biochemical and phenotypic testing. Permits DST (drug sensitivity test). Can take as long as 8 weeks. Sensitivity 80-85%. Specificity 98%.

CONCLUSION

Mtb is endemic and should be suspected in all cases of infective wounds showing delayed healing even with proper treatment. Soft tissue tuberculous abscesses are a rare and unusual presentation of tuberculosis commonly found in immunocompromised individuals. It is often misdiagnosed because of low index of suspicion. In our case despite regular dressing and proper wound care, patient's wound was not healing as expected.

Tuberculosis was diagnosed following investigations that were sent for the pus sample. The patient was then started on AKT following which he responded well. Wound started healing progressively.

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