

CASE REPORT

INTRA-GLUTEAL ABSCESS FOLLOWING INTRAMUSCULAR INJECTION PRESENTING AS FEVER OF UNKNOWN ORIGIN

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ABSTRACT: Intramuscular injections are commonly given in clinical practice and generally are without any complications. Minor discomfort and pain is common for a short period following the injection. Intra-gluteal abscess has been reported earlier but its presentation as FUO is uncommon. We are reporting these two cases to stress the importance of probing the history of intramuscular injections in patients without an apparent cause of fever.

KEYWORDS: Intramuscular injection, Intra-gluteal abscess, Fever of unknown origin.

INTRODUCTION: Intramuscular injections are commonly given in clinical practice and generally are without any complications. Commonly given intramuscular medications are antipyretics and analgesics. Here, we report two cases of fever of unknown origin (FUO) due to intra-gluteal abscess complicating intra-gluteal injections.

CASE REPORT-1: A 65years old man presented with 1month history of low grade fever. Fever was continuous and was associated with chills without rigors. There were no localizing symptoms and patient did not have any co-morbid illness such as diabetes and hypertension. There was no history of exposure to a tuberculosis case. Patient was a farmer by occupation and had history of exposure to cows. Examination did not reveal any abnormalities. Blood tests showed hemoglobin of 13.5 gm/dl, total WBC count of 12,000/cumm with neutrophilia.

Tests for malaria were negative. His urine analysis, renal function tests, and liver function tests were normal. Chest x-ray, ECG and echocardiogram were also normal. Brucella serology was negative. Blood culture did not grow any organisms. Widal, HIV-ELISA, HBsAg, anti HCV, VDRL and TPHA were also negative. Patient was empirically started on injection ceftriaxone and azithromycin to cover for possible enteric fever. Fever subsided for two days and again recurred in spite of continuing the antibiotics.

At this time, patient mentioned that he has mild pain in the right gluteal region. On further questioning, he revealed that the gluteal pain had started 35 days prior to admission after he received an intramuscular injection to gluteal region for right knee joint pain. Fever had started five days after the onset of gluteal pain. An ultrasound of the gluteal region was done which showed a 5 X8cms abscess. General surgery consultation was sought and the abscess was drained. Patient became afebrile from the next day of drainage of abscess and he was discharged after he remained afebrile for 5 days.

CASE REPORT-2: A 50years old lady presented with 3 weeks history of mild to moderate fever. Fever was intermittent and present mainly in the evening and was associated with chills and

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rigors. Patient was a diabetic and was on oral anti-diabetic agents. There was no history of exposure to tuberculosis case and or travel to any place prior to the onset of fever. Examination was unremarkable except for the signs of peripheral neuropathy.

Her blood sugars were not well controlled at the time of admission as evidenced by an RBS of 256 mg/dl, FBS of 190 mg/dl and PPBS of 240 mg/dl. All the other blood tests as done for the above patient were also negative. Patient had received an unknown injection three times over a period of one week for generalized weakness before coming to us. On further questioning patient mentioned that there is mild pain in the left gluteal region where she had received two of three injections. Ultrasound of the both gluteal regions was done which showed a deep abscess in the left gluteal region. Patient became afebrile after the abscess was drained.

DISCUSSION: Patients commonly receive intramuscular injection for various indications. Complications following intramuscular injections are uncommon. Most complications of intramuscular injections are a result of the drug injected and not the procedure. Minor discomfort and pain is common for a short period following the injection, but usually resolves within a few hours. Other possible complications include abscess and cyst formation, necrosis and sloughing of skin, scar formation, lingering pain, intravascular injections, periostitis and peripheral nerve injuries with consequent neurological deficits.

Infections such as gluteal abscess occur due to contaminated injectable or lapse in sterilization protocol. Such complications not only cause increased morbidity for the patient but may also provide bases for malpractice suits.⁵ Intra-gluteal abscess has been reported earlier¹⁻⁴ but its presentation as FUO is uncommon.

Usual pathogens causing abscess following intramuscular injection are pseudomonas, Klebsiella, E-coli and S. aureus. Other unusual organisms such as mycobacteria, particularly the rapidly growing non-tuberculosis mycobacteria (NTM) have also been reported to cause the abscess⁵. Sometimes there may not be any local signs pointing towards abscess formation.⁴ We are reporting these two cases to stress the importance of probing the history of intramuscular injections in patients without an apparent cause of fever.

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