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PYOMYOSITIS DUE TO METHICILLIN-SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SECONDARY TO INTRAMUSCULAR CORTICOSTEROID INJECTION: CASE REPORT

Lucas Viechniewski Vasconcellos [*],
Maria Júlia Soares Mussi,
Fernanda Pereira Pedroso, Gabriele da Silva,
Pamela Maira Streiechen

Hospital Nossa Senhora das Graças, Curitiba, PR, Brazil

A 72-year-old male patient, previously healthy, was admitted with fever, asthenia and pain in the right gluteal region at the site of a prior intramuscular corticosteroid injection. He had fever, tachycardia and laboratory tests showing leukocytosis with left shift, renal dysfunction, and elevated C-reactive protein and lactate levels. Blood cultures were collected and ampicillin-sulbactam was started. Pelvic magnetic resonance imaging showed pyomyositis with a large abscess in the gluteus medius and minimus muscles, extending to the adductor longus and iliopsoas. Surgical debridement with fasciotomy and culture collection was performed. Due to the severity of the condition, empirical daptomycin was added to the antimicrobial regimen. Intraoperative cultures identified methicillin-susceptible Staphylococcus aureus (MSSA), and therapy was de-escalated to cefazolin. The patient improved clinically and was discharged on sulfamethoxazole-trimethoprim to complete six weeks of treatment at home. Pyomyositis is a bacterial intraparenchymal infection of skeletal muscle, characterized by abscess formation and also known as tropical pyomyositis. The main pathogen involved is Staphylococcus aureus, and the frequently affected sites are the large muscles of the lower limbs. It is more often seen in immunosuppressed individuals. Mortality ranges from 0.89% to 23%, and early diagnosis is the most effective intervention to minimize disease complications. In advanced stages, fever and myalgia/claudication are the most common symptoms, sometimes associated with bacteremia and sepsis, toxic shock syndrome or osteomyelitis (by contiguity or hematogenous spread). In resource-limited settings, the diagnosis of pyomyositis is based on clinical presentation and ultrasound, although magnetic resonance imaging is the gold standard. Primary treatment regimens include anti-staphylococcal penicillins in suspected or confirmed MSSA infections. In suspected or confirmed MRSA, vancomycin, linezolid or daptomycin are indicated. In suspected anaerobic involvement, metronidazole is recommended. Surgical drainage is indicated for all patients. Treatment duration ranges from 2 to 4 weeks, depending on clinical response, with the possibility of switching to oral therapy if evolution is favorable.

Keywords: Pyomyositis, Staphylococcus aureus, MSSA, Myositis.

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PRIMARY PYOMYOSITIS DUE TO METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS: CASE REPORT

Adriana Oliveira Guilarde [a,*],
Moara Alves Santa Bárbara Borges [a],
Anna Eugênia Villela Martins Naves [b],
Filippe Ferreira Morais [b],
Renata Garcia de Napoli [a]

[a] *Hospital das Clínicas da Universidade Federal de Goiás (UFG), Goiânia, GO, Brazil*
[b] *Hospital Estadual de Doenças Tropicais (HDT), Goiâna, GO, Brazil*

Primary pyomyositis, formerly known as tropical pyomyositis, is an infection that presents with abscess formation in skeletal musculature, mainly in the extremities, hip and pelvis, with Staphylococcus aureus as the main etiologic agent. Among possible complications, we highlight toxic shock syndrome and septic emboli. A 44-year-old Indigenous woman with diabetes and hypertension was admitted to a tertiary hospital in the Center-West region of Brazil with diffuse myalgia, productive cough and multiple skin lesions draining purulent exudate. Symptoms began 1 month earlier with pain in the lower limbs, progressive worsening, intense diffuse pain and the appearance of lesions in the intergluteal region, lateral leg and dorsum of the left foot. She had dressings applied at home with macerated herbs, according to Indigenous rituals. Computed tomography (CT) of the chest, abdomen and lower limbs showed multiple collections in the left gluteal region suggestive of necrotizing involvement, multiloculated confluent lesions in the lower limbs involving bilateral muscular and subcutaneous planes, with peripheral contrast enhancement. Chest CT showed paravertebral intramuscular collections and randomly distributed nodular opacities throughout both lungs, some with cavitary appearance, suggesting hematogenous dissemination. Treatment with ceftriaxone and oxacillin was started. Samples were collected for culture from aspirated secretions and tissue fragments, and S. aureus methicillin-resistant (MRSA) was identified, susceptible to clindamycin, vancomycin, teicoplanin and linezolid. Due to clinical worsening under the initial therapy, antimicrobials were switched to linezolid and meropenem. She required multiple surgical reinterventions, and subsequent cultures yielded new MRSA isolates, as well as ESBL-producing Klebsiella pneumoniae and Kluyvera ascorbata resistant to ceftriaxone. All blood cultures were negative. The patient developed severe hypoxemia and hemodynamic instability during one of the reinterventions, requiring intubation and vasoactive drugs. After this event, she evolved with several healthcare-associated complications: ventilator-associated pneumonia and colitis. There was neurological damage due to hypoxia, and she remains with open gluteal lesions, without surgical conditions and in palliative care.

Keywords: Primary pyomyositis, Staphylococcus aureus, Tropical pyomyositis.

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