

Multifocal pyomyositis after intra-articular injections

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An 82-year-old female who had received injections of hyaluronic acid into her knee joints several times because of osteoarthritis was admitted to a local hospital because of fever. Methicillin-susceptible *Staphylococcus aureus* was detected from cultures of blood and knee-joint fluid. Cefazolin administration was initiated. However, her condition did not improve for 3 weeks, so she was transferred to our hospital. She could not sit down because of systemic pain, but focal signs were absent. Computed tomography demonstrated multiple abscesses in trapezius (Figure 1A), triceps (B), iliopsoas (C), erector spinae (C), and quadriceps (D) muscles that extended around the hip joint

and pubic bone. She was diagnosed with multifocal pyomyositis due to *S. aureus*. Management comprised surgical drainage and antibiotic administration for a long period.

Pyomyositis is a pyogenic infection of the larger skeletal muscles and is usually accompanied by abscess formation. Pyomyositis is usually endemic in countries with tropical climates, but has been recognized with increasing frequency in temperate climates.¹ Pathogenesis of pyomyositis is not known. Skeletal muscle is usually resistant to bacterial infection. Experimental injection of *S. aureus* into the leg muscles of dogs or intravenous injection of *S. aureus* does not result

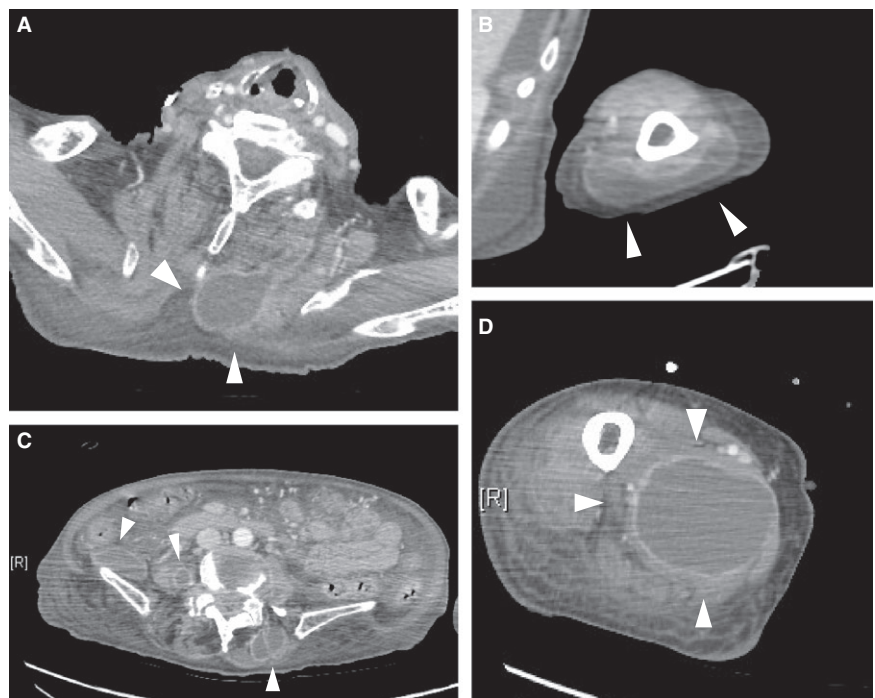


FIGURE 1 Contrast-enhanced computed tomography

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inContrast-enhanced computed tomographyabscess formation.^{2,3} Intra-articular injections have been described as a cause of staphylococcal abscesses only rarely.

Our patient presented with a nontropical multifocal pyomyositis that was probably related to intra-articular injections. Awareness of the clinical manifestations of pyomyositis and their possible association with intra-articular injections would lead to an earlier diagnosis and treatment. Computed tomography should be considered for systemic evaluation because pyomyositis can be multifocal, even though focal signs are absent.

CONFLICT OF INTEREST

The authors have stated explicitly that there are no conflicts of interest in connection with this article.

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