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Infectious Disease

Man with knee pain and rash

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1 | PATIENT PRESENTATION

A 30-year-old male with a history of diabetes and end stage renal disease presented with a 2-day history of pain and swelling to the left knee. The patient denied any trauma or previous interventions to the knee, but does report that he works as a painter and is often on his knees working. He last worked 3 days before evaluation and woke up the subsequent morning with an acutely painful and swollen

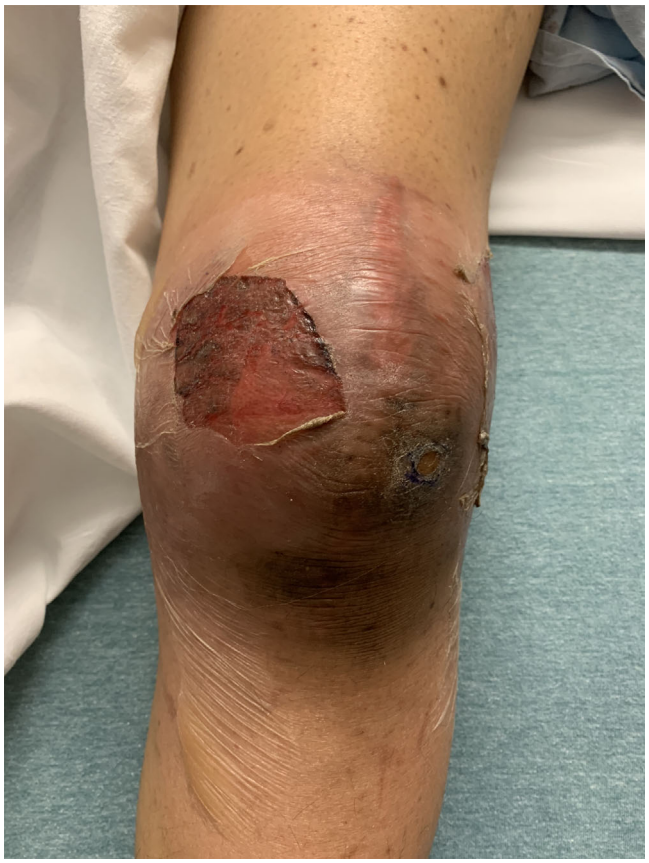

FIGURE 1 Left knee with large effusion, erthema and overlying desquamating rash

FIGURE 2 Left upper extremity with similar desquamating rash and excoriations

knee. Later that day, he developed skin sloughing, subjective fevers, and a burning sensation diffusely across his body. Physical examination revealed a swollen, erythematous left knee with palpable suprapatellar effusion and an overlying desquamating rash with a positive Nikolsky sign (Figure 1). Similar cutaneous findings were present diffusely over the torso and the left upper extremity graft site (Figure 2).

2 | DIAGNOSIS

2.1 | Staphylococcal scalded skin syndrome secondary to septic prepatellar bursitis

Staphylococcal scalded skin syndrome is a disease primarily of children and neonates, but can still be seen in the adult population.[1] The incidence in children is 7.67 cases/million, whereas in adults it is 0.98 cases/million.[1] In adults, the most common underlying illness is renal disease or immunosuppression.[2] Staphylococcal scalded skin syndrome is caused by exfoliative toxin A or B and usually is a clinical diagnosis, but can be confirmed with histopathology if necessary.[2,3] Clinical features include erythroderma, desquamating rash, positive Nikolsky's sign, and the absence of mucosal involvement.[3] Empiric treatment involves an intravenous anti-staphylococcal antibiotic until sensitivities return along with hydration via intravenous fluids.[2,3]

This patient was found to have methicillin-resistant *Staphylococcus aureus* (MRSA) septic prepatellar bursitis of the left knee as confirmed by intraoperative cultures. Based on his presentation, he likely developed an inflammatory prepatellar bursitis due to repetitive trauma due to his occupation. Subsequently, this bursitis became superinfected with MRSA, leading to the acute onset of symptoms and Staphylococcal scalded skin syndrome. With operative debridement and appropriate antibiotics, the patient was discharged home after significant improvement.

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