Practice | Clinical images

A black perineal skin lesion: a sign of Fournier gangrene

Seigo Urushidani MD PhD, Naoki Oka MD

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An 84-year-old man was found to be hypotensive before receiving his regularly scheduled dialysis treatment and was referred to our emergency department. He reported slight fatigue but did not have any pain. On arrival, his blood pressure was 58/13 mm Hg and his heart rate was 102 beats/min. He had a normal respiratory rate and was afebrile. He had a score of 15 on the Glasgow Coma Scale (E4, V5, M6). The only potential source of infection that we identified was a small, black skin lesion near the anus, with induration and slight tenderness (Figure 1A).

and slight tenderness (Figure 1A). Based on his clinical presentation, we diagnosed perineal fasciitis, also known as Fournier gangrene. We administered intravenous fluids and vasopressor support, and urgently consulted surgery. After stabilization, a computed tomography scan showed subcutaneous free air behind the rectum (Figure 1B).

Imaging did not delay definitive management; we transferred the patient to the operating room for emergent surgical débridement. The blackened skin, subcutaneous tissue and lower rectum were necrotic, with sparing of the perineal muscle. A fullthickness perforation from necrosis in the lower rectum was identified, and a partial rectal resection with colostomy was performed. We treated the patient with meropenem and vancomycin, and he remained in the intensive care unit for 7 days postoperatively. He was discharged after 2 months of rehabilitation.

Even in well-resourced settings, the mortality associated with Fournier gangrene has been reported to be 7%–20%.^{1,2} Patients with suspected Fournier gangrene require appropriate resuscitation, aggressive surgical débridement and critical care management that should not be delayed by diagnostic testing.^{1,2} Hypotension and hemorrhagic bullae are highly specific for Fournier gangrene, but occur late in the disease course.³ Diagnosing Fournier gangrene in its early stage can be challenging. In this case, although the patient did not report pain, we detected black discoloration of the skin in the perineal area. When assessing patients with an unknown cause of shock, careful physical examination is necessary, and Fournier gangrene should be considered if perineal black skin lesions are present.

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Figure 1: (A) Black perineal lesion near the anus at initial presentation of an 84-year-old man with Fournier gangrene. An area of induration with slight tenderness is indicated by the dashed line. (B) Computed tomography scan of the perineal lesion, showing free air in the subcutaneous space behind the rectum (yellow arrowhead).

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Affiliations: Emergency and Critical Care Center (Urushidani), Kurashiki Central Hospital, Kurashiki, Japan; Department of Emergency Medicine (Oka), Kameda Medical Center, Kamogawa, Japan.

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Correspondence to: Seigo Urushidani, s-urushidani@kchnet.or.jp