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ΑΡΧΕΙΑ ΕΛΛΗΝΙΚΗΣ ΙΑΤΡΙΚΗΣ 2022, 39(6):864

Surgery Quiz – Case 43

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A 71-year-old woman with low-activity systemic lupus erythematosus (SLE) under prednisone 10 mg/day and hydroxychloroquine 400 mg/day, presented to emergency department with acute fever, malar-rash and intractable low-back pain to repeated intravenous (IV) doses of paracetamol 1 g, tramadol 100 mg and parecoxib 40 mg. Upon admission the patient had normal consciousness, temperature 39.1 °C, mean arterial pressure (MAP) 65 mmHg, heart rate 94/min, breathing rate 32/min. Laboratory tests were remarkable for leukopenia, lymphopenia, elevated creatinine suggestive of stage II acute renal injury, elevated creatine phosphokinase, metabolic acidosis with respiratory compensation and microscopic hematuria. Whole-body computed tomography (CT) was remarkable for enlargement of superficial and deep muscles of the right gluteal and posterior thigh compartment with decreased attenuation, massive intramuscular gas collection and stranding of surrounding fat planes, as shown in figure 1. The patient with the diagnosis of extensive necrotizing myositis with suspected infectious cause during a SLEDAI-2K score 12 SLE flare, admitted to intensive care unit (ICU) with and SOFA score 6.

What is the most appropriate treatment in the emergency setting?

(a) Pulse-dose corticosteroids, broad-spectrum antibiotics and supportive care
(b) Close observation
(c) Emergent fasciotomy and debridement
(d) "a" and "b"
(e) "a" and "c"

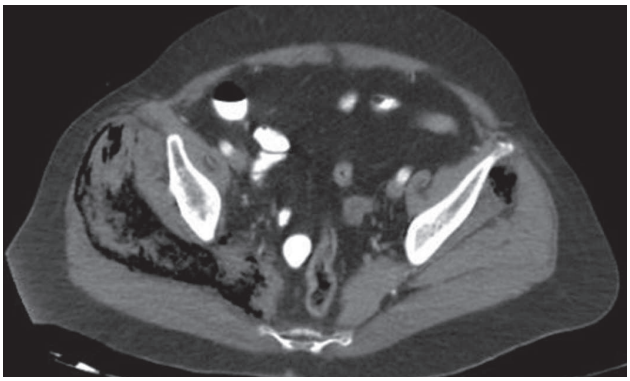

Figure 1.

Comments

Initial resuscitation included IV administration of lactated Ringer's solutions, methylprednisolone 1 g, empirical coverage with daptomycin 500 mg, proton pump inhibitors (PPIs), subcutaneous (SC) tinzaparin 8,000 anti-Xa IU followed by emergency surgery with combined general and epidural anesthesia including fasciotomy of right gluteal and posterior thigh compartment along with debridement of the necrotic muscles. Despite initial aggressive medical and surgical management, the patient developed refractory septic shock requiring high dose of norepinephrine to maintain target MAP 60 mmHg, minimization of sedation, IVIG, continuous renal replacement therapy leading to death on postoperative day 2 before proceeding to completion debridement. Interestingly, urine, blood and wound cultures proved negative. Serology revealed low complement and high anti-dsDNA antibodies. Consequently, final diagnosis was extensive acute non-infectious/immune-mediated necrotizing myositis of the right gluteal and posterior thigh muscles with associated compartment syndrome causing intractable low-back pain during a severe SLE flare leading to severe systemic inflammatory response syndrome (SIRS) and refractory shock.

References

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Diagnosis: *Pulse-dose corticosteroids, broad-spectrum antibiotics and supportive care followed by emergent fasciotomy and debridement*