Multiple muscle abscesses in a uremic patient

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A 48-year-old woman receiving hemodialysis via arterial-venous fistula presented with right gluteal region pain and fever. Initially, antibiotics were prescribed but her fever did not subside. Computed tomography (CT) pelvic images displayed low attenuation lesions on the right piriformis muscle (Fig. 1, panel A) and psoas muscle (Fig. 1, panel B). Muscle abscess was suspected. The surgeon and radiologist suggested a CT-guided percutaneous drainage for piriformis muscle and antibiotics. The drainage yielded a large amount of pus fluid. Three days later, the patient's lower back pain and fever had not subsided. A second pelvic CT was done, which disclosed an enlarged lesion on the iliopsoas muscle (Fig. 2). Subsequently, exploratory retroperitoneum open drainage was performed for the abscess on the iliopsoas muscle. Cultures from the pus and blood showed methicillin-resistant *Staphylococcus aureus*. After a month of therapy with vancomycin and drainage, follow-up CT showed complete remission.

Fig 1. Computed tomography scan reveals (A) a low-attenuation lesion on the right iliopsoas muscle (white arrow) and (B) a low-attenuation lesion on the right piriformis muscle (black arrow).

A single-muscle abscess in a uremic patient has been reported,^{1,2} which may arise through contiguous spread from adjacent structures or by the hematogenous route from a distant site. In our case, a uremic patient presented piriformis and psoas muscle abscesses simultaneously. However, it is difficult to determine whether these two muscle abscesses occurred at the same time or developed one after the other. Neither could we determine the micro-organic cause of the muscle abscess. To our knowledge, this is the first case in which a uremic patient has presented multiple muscle abscesses.

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Fig 2. Computed tomography scan demonstrates the enlarged lesion on the right iliopsoas muscle (arrow).

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