CORRESPONDENCE

Necrotizing Fasciitis Involving the Peritoneal Catheter Exit Site

Editor:

Necrotizing fasciitis is a serious infection of the subcutaneous tissue and fascia that progresses rapidly. Methicillin-resistant *Staphylococcus aureus* (MRSA) is a bacterium responsible for several difficult-to-treat infections in humans. The problem of MRSA is especially acute in hospitals and nursing homes, where patients with open wounds, invasive devices, and poor immune function are at greater risk of infection.

A 61-year-old woman was admitted to the peritoneal dialysis (PD) outpatient clinic with complaints of nausea, abdominal pain, and fever. The patient had been receiving continuous ambulatory PD for 3 months because of diabetic nephropathy, and she had experienced dialysate leakage twice during that period. Her body temperature was 37.2°C, and her blood pressure was 90/60 mmHg. Physical examination of the abdomen revealed hyperemia, edema, and an erosion of the abdominal skin about 20 cm in diameter, with necrosis that included the PD catheter exit site (Figure 1). This patient's peritoneal fluid was turbid, and laboratory analysis revealed a significantly increased white blood cell count (550/mm³, 92% neutrophils).

Figure 1 — Necrotizing fasciitis involving the peritoneal dialysis catheter exit site.

Empiric therapy was initiated with ceftazidime and vancomycin. The patient's PD catheter was removed, and hemodialysis was initiated. Culture of the peritoneal fluid did not reveal any organisms, but cultures from the lesion grew MRSA, and the patient's existing antibiotic therapy was continued for 21 days. During therapy, the patient's appetite recovered, and she became stable on the fourth day of treatment. She was then discharged, continuing on hemodialysis.

Necrotizing fasciitis is a rare but serious complication of PD that can be fatal (1). When the traditional approach fails, alternative choices such as extracorporeal blood oxygenation and ozonation may be helpful (2). Dialysate leaks are common, and it is extremely rare for them to result in a necrotizing lesion, but necrotizing fasciitis may be the occasional result in a PD patient (3).

We think that dialysate leakage may be a minor risk factor for necrotizing fasciitis, which is a deadly complication of PD. Early intervention and catheter removal in cases that involve the PD catheter may be life-saving.

DISCLOSURES

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