Necrotizing Fasciitis after Cesarean Delivery

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This 27-yr-old patient (preoperative body mass index, 32 kg/m²) presented 12 days after a repeat cesarean delivery. The patient complained of pain, swelling, and a 6 × 4-cm complex mass of blood-filled bullae on her abdominal panniculus, 7 cm from her well-healed incision. She was afebrile and not diabetic. Her hemoglobin concentration was 8.3 g/dl; leukocyte count, 23,200/ml; and creatinine concentration, 3.9 mg/dl. Bleeding, not infection, was suspected; necrotizing fasciitis was not diagnosed until the computed tomographic scan was examined (fig.). Surgical debridement required removal of 75% of the panniculus. The patient went to intensive care intubated, on a phenylephrine infusion, with her open wound packed. She was discharged home with negative-pressure wound therapy. The wound healed completely, and the patient’s renal function normalized.

Necrotizing fasciitis is a rapidly progressing, usually polymicrobial, infection of subcutaneous tissue. The infection can spread up to 2.5 cm/h, with minimal change in the overlying skin.¹ Erythema, swelling, and severe pain are generally seen at presentation.¹ Bullae and soft tissue gas (fig.) are late signs.¹ Anemia, hyponatremia, hypoglycemia, and increased creatinine, C-reactive protein, and leukocyte count are laboratory risk indicators for necrotizing fasciitis.¹ Magnetic resonance imaging or computed tomography can establish the diagnosis and guide the extensive surgical debridement.¹ Obesity is a risk factor for postcesarean necrotizing fasciitis, which has an incidence of 2 per 1,000 cesarean deliveries.² Because necrotizing fasciitis-associated mortality increases as the time to intervention lengthens, anesthesiologists can improve care for these patients by facilitating prompt surgical debridement.¹

References