

CASE 25-1

A 40-year-old man with a recent history of cellulitis is admitted to the hospital with fever, chills, and a progressive rash most prominent on the extremities. Central necrosis and eschar formation develop in some of the larger lesions. Blood cultures grow methicillin-resistant *Staphylococcus aureus*. Complete blood count shows leukocytosis, anemia, and thrombocytopenia.



What is the one most likely diagnosis?

- (A) Amyloidosis
- (B) Pigmented purpuric dermatoses
- (C) Vitamin C deficiency
- (D) Purpura fulminans
- (E) Leukocytoclastic vasculitis

The correct answer is (D), purpura fulminans.

Purpura fulminans is the cutaneous manifestation of microvascular occlusion and represents a medical emergency. It results in a branching or retiform pattern of purpura, with rapid progression to necrosis that begins centrally. There are many causes of purpura fulminans, including postinfectious purpura fulminans which is most commonly secondary to varicella, Streptococci, *Neisseria meningitidis*, *Staphylococcus aureus*. Sepsis-related purpura fulminans presents as described above in the clinical case. It is important to treat the underlying infection, assess for disseminated intravascular coagulation, check levels of protein C and S, and treat as appropriate.

Pigmented purpuric dermatoses are asymptomatic macules typically on the lower legs. Vitamin C deficiency presents with perifollicular hemorrhage, while leukocytoclastic vasculitis is characterized by palpable purpura which is generally not retiform in nature, even when it may present as hemorrhagic bullae.