

### CASE 25-3

A 44-year-old woman presented with purpura on the legs, along with urticarial papules and plaques on the hands and feet, edema, fever, arthritis, and lymphadenopathy 10 days after starting infliximab. Her laboratory studies show decreased C3 and C4, leucopenia, and elevated erythrocyte sedimentation rate (ESR).



**What is the one most likely diagnosis?**

- (A) Pigmented purpura
- (B) Serum sickness
- (C) Serum sickness-like disease
- (D) Stasis dermatitis
- (E) Cholesterol emboli

The correct answer is (B), serum sickness.

Serum sickness is due to immune complexes produced after exposure to non-human serum derived from animal sources (eg, rituximab, antithymocyte globulin, and infliximab). It is a clinical diagnosis associated classically with the following 5 symptoms: cutaneous eruption, arthritis, fever, edema, and lymphadenopathy. In rare cases, immune complexes can involve other organs such as joints and kidney. Symptoms usually develop 4 to 10 days after exposure.

Serum sickness-like eruption is not associated with hypocomplementemia, circulating immune complexes, vasculitis, and renal disease (cefactor is a common cause of serum sickness-like reaction in children). Pigmented purpura (eg, Schamberg's purpura) should not be associated with systemic symptoms. Cholesterol emboli typically manifest with distal livedo reticularis, and stasis dermatitis typically has more diffuse dyspigmentation and is accompanied by lower extremity edema.