Answers to Dermato-venereological Quiz on pages 224-225

1. The differential diagnoses include pyoderma gangrenosum, vasculitis, acute febrile neutrophilic dermatitis and ecthyma gangrenosum.
2. The biopsy showed a wedged-shaped dense mixed inflammatory infiltrate in the dermis. The inflammatory infiltrate contains numerous neutrophils with abscess formation and many histiocytic cells. There is no fibrinoid necrosis of vessel walls.
3. The diagnosis is pyoderma gangrenosum. Pyoderma gangrenosum is an ulcerative cutaneous condition of uncertain aetiology. It is associated with systemic diseases in at least 50% of patients. The lungs, the heart, the central nervous system, the gastrointestinal tract, the eyes, the liver, the spleen, the bone and the lymph nodes may be involved. The aetiology of pyoderma gangrenosum is poorly understood. It is believed to be related to neutrophil chemotaxis. Pyoderma gangrenosum usually starts as a small, red papule or pustule which then progresses to a larger ulcerative lesion with violaceous borders. Pain is the major complaint. Pyoderma gangrensoum usually improves with immunosuppressive therapy, but it may recur and residual scarring is common.
4. Topical therapies including superpotent topical corticosteroids, topical calcineurin inhibitors and local wound care may benefit some patients. Most patients with pyoderma gangrenosum improve with the initiation of immunosuppressive therapy e.g. corticosteroid, ciclosporin and mycophenolate mofetil. Intravenous therapies including pulsed methylprednisolone, pulsed cyclophosphamide and IVIG may be needed in more severe cases. Surgery should be avoided because of the pathergy phenomenon which may occur in about 30% of cases.