CASE 35-1

A 40-year-old woman with Crohn’s disease presents with a 2-month history of a nonhealing ulcer on her left leg. She denies fever, chills, or joint pains.

What is the best initial step in management of this patient?

(A) Sterile skin biopsy for histopathologic examination and bacterial, mycobacterial, viral, and fungal cultures

(B) X-ray the leg to assess for osteomyelitis

(C) Swab the base of the wound for herpes virus

(D) Order an ankle-brachial index to assess for peripheral vascular disease

(E) Unna boot for compression therapy
The correct answer is (A), sterile skin biopsy for histopathologic examination and bacterial, mycobacterial, viral, and fungal cultures.

The patient in this case has pyoderma gangrenosum (PG), which is associated with Crohn’s disease. PG classically has a dusky red/purple border, like the lesions displayed in this case. The evaluation for patients with presumed PG includes taking a comprehensive history, doing a thorough examination, and obtaining a deep tissue biopsy for hematoxylin and eosin staining and culture to rule out other conditions such as infection, malignancy, or vasculitis. An x-ray of the underlying bony structures is not indicated in most cases of PG, unless, there is concern that the ulcer extends down to the bone. Swabbing the base of the wound for herpes viruses is not the best initial evaluation of this patient as the herpes virus rarely causes deep ulcers. Ankle-brachial indices are helpful if ulceration is thought to be due to arterial disease. The location of this lesion around the level of the knee, the violaceous rim and the wet appearing base make an arterial ulcer in this scenario unlikely. The lack of edema and stasis dermatitis in this case makes venous ulcer also unlikely, thus making compression therapy an inappropriate treatment option.