A 75-year-old woman with chronic lymphocytic leukemia undergoing ibrutinib targeted therapy presented to the emergency department with fever and perianal pain of 4 months’ duration. The patient denied history of genital or perianal ulcers, warts, masses, bedsores, prolonged immobilization, anal surgeries, or recent travel. She had not been previously treated for the perianal pain. On physical examination there was an 18×15-cm shallow ulceration with rolled borders involving the intergluteal cleft and perianal area. There were numerous hyperpigmented verrucous papules clustered in the center of the ulceration. No vesicles or bullae were present. Laboratory results were pertinent for a white blood cell count of 3600/µL (reference range, 4500–11,000/µL) and absolute neutrophil count of 1300/µL (reference range, 1900–8000/µL). Human immunodeficiency virus testing was negative.

WHAT’S THE DIAGNOSIS?

a. cutaneous Crohn disease
b. herpes simplex virus infection
c. invasive squamous cell carcinoma
d. *Mycobacterium tuberculosis* infection
e. pyoderma gangrenosum

Please turn to page E23 for the diagnosis.
Herpes Simplex Virus Infection

Virulence culture of the ulcer was positive for herpes simplex virus type 2 (HHV-2). Bacterial culture grew enteric flora. The patient was started on intravenous acyclovir 5 mg/kg every 8 hours for 7 days and then transitioned to oral acyclovir for chronic suppressive therapy. One month later, there was near-complete reepithelialization with 2 remaining 1-cm shallow ulcers. The verrucous lesions had dried up and were flaking off (Figure). At 6-month follow-up, the ulcers and verrucous lesions had completely resolved.

Herpes simplex virus type 2 is the most common cause of genital and perianal ulcers in immunocompromised individuals. Patients classically present with painful grouped vesicles followed by painful superficial ulcers that may rapidly progress to extensive confluent ulceration. A hypertrophic variant of genital herpes characterized by anogenital verrucous lesions, similar to condyloma acuminata, also can be seen in immunocompromised individuals. This form has almost exclusively been observed in patients with human immunodeficiency virus and may occur in isolation or together with the ulcerative form. A case of vegetative HHV infection of the genital area in a patient with common variable immunodeficiency has been reported. Verrucous lesions of the mouth secondary to HHV have been observed in Hodgkin lymphoma, acute myelogenous leukemia, and individuals on immunosuppressive medications.

Perianal involvement of Crohn disease typically presents with fistulas, ulcers, abscesses, strictures, and skin tags in some cases. Invasive squamous cell carcinoma may arise within a chronic ulcer of the anogenital area or may itself manifest as an ulcer or anal fissure. Perianal ulcerative skin tuberculosis has been reported in the literature as a rare manifestation of extrapulmonary tuberculosis and should be considered in a patient with an appropriate clinical history. Pyoderma gangrenosum classically presents as a large ulcer with irregular rolled borders, though a rare variant of vegetative pyoderma gangrenosum may manifest as a nodular or verrucous plaque.

Studies to diagnose HHV include viral cell culture, HHV polymerase chain reaction testing, HHV serology, and direct fluorescent antibody testing. Skin biopsy may be necessary to rule out underlying malignancy. Treatment of perianal HHV infection includes acyclovir, valacyclovir, and famciclovir. Hypertrophic lesions often are refractory to first-line antiviral therapy and may require surgical resection or treatment with alternative medications such as imiquimod, a topical immunomodulator.

**REFERENCES**