

## Cutaneous Cytomegalovirus Infection in a Case of Myasthenia Gravis

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### Case Presentation

A 66-year-old man with a known case of myasthenia gravis presented with multiple painful ulcers over the buttock, lower abdomen, and trunk for one month. Cutaneous examination showed multiple ecthymatous to ulcerative lesions with slough over the buttocks, perianal area, and over the lower abdomen and upper back, largest measuring 3 x 3 cm to smallest measuring 1x1 cm (Figure 1). Wedge biopsy from the perianal ulcer showed ulceration of the epidermis with lymphocytic infiltrate with epithelioid histiocytes and foreign body type of giant cells in the superficial dermis. The endothelial cells exhibited nucleomegaly with basophilic smudgy chromatin with occasional basophilic prominent intra-nuclear inclusions. Immunohistochemistry showed nuclear positivity of the endothelial cells for cytomegalovirus.

### Teaching Point

Human cytomegalovirus (CMV) infection usually occurs in immunocompetent individuals causing the infectious mononucleosis-like syndrome. Although systemic symptoms are more common in immunosuppressed individuals with CMV infection, some can present with cutaneous manifestations that are difficult to diagnose based on their clinical appearance. The cutaneous manifestations of the CMV virus are maculopapular rash, blisters, bulla, erosions, plaques, and nodules. The most common presentation is cutaneous ulcers, which may be tender or non-tender and usually located over the genitalia, perianal, gluteal regions, and oral mucosa [1]. Since the virus remains latent in the gastrointestinal tract and sheds during reactivation, leading to the preferential location of the



**Figure 1.** Multiple ulcers over the perianal and gluteal region with minimal slough size ranging from 3 x 3 cm to 1 x 1 cm.

ulcers over the perianal and gluteal area [2]. CMV-induced skin ulcers should be considered in immunosuppressed patients who are not responding to antibiotic therapy, similar to our case. The diagnosis of CMV ulcers can be made by histology with immunohistochemistry and by serum polymerase chain reaction. Histopathological examination shows owl eye inclusions with cytopathic changes predominantly over the vascular endothelial cells and macrophages [2].

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