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Esophageal Monkeypox lesion

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A 30-year-old cis-male living with well-controlled human immunodeficiency virus (HIV) infection presented with a six-day history of perianal and tongue lesions and two days of fever, sweats, and odynophagia manifested as retrosternal chest pain when consuming fluids. His past medical history included HIV, treated with abacavir-dolutegravir-lamivudine and darunavir-cobicistat, with recent CD4 count of 192 and an undetectable viral load, as well as previously treated mycobacterium avium complex disease with lymph node involvement. His other medications include trimethoprim-sulfamethoxazole, azithromycin, moxifloxacin, and ethambutol. There was a history of receptive oral intercourse without condoms in the prior 28 days. He had been taking non-steroidal anti-inflammatories for the perianal pain. Esophagogastroduodenoscopy revealed an 8 mm shallow ulcer in the mid-esophagus located at 29 cm from the incisors (Figure 1). Blood, cutaneous lesions (Figure 2), and esophageal lesions tested positive for monkeypox virus (MPVX) by polymerase chain reaction. Pathology from an esophageal lesion biopsy showed squamous mucosa with lymphocytic inflammation (Figure 3). Other findings that have been reported in esophageal MPVX from animal models include epithelial cell and fibroblast proliferation, multinucleated syncytial cells, and necrotizing lesions. MPVX antigen has also been demonstrated by immunohistochemistry in *Cynomolgus* monkeys among epithelial cells, macrophages, and fibroblasts from sites with morphologic involvement.

The patient was initiated on tecovirimat. His odynophagia began to improve two days after initiating treatment. At follow up two weeks from esophagogastroduodenoscopy, his perianal and tongue lesions had resolved. While rates of esophageal involvement among patients with MPVX infection are unclear due to lack of endoscopic investigations in the majority of patients, dysphagia and odynophagia are reported in up to 70% of patients. These symptoms may be due to oral ulceration, but should also signal the possibility of upper gastrointestinal involvement and endoscopic evaluation.

FIGURE 1: Mid-esophageal 8mm shallow ulceration located 29cm from the incisors

FIGURE 2: Upper thigh lesion

FIGURE 3: Esophageal lesion biopsy demonstrating squamous mucosa with lymphocytic inflammation





