

Pyogenic granuloma-like orf in a transplant patient treated successfully with excision and imiquimod



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INTRODUCTION

Orf is a zoonotic infection caused by a parapoxvirus that is most commonly acquired from close contact with affected sheep or goats. It typically presents as a lesion on the extremities that progresses through several stages including maculopapular, targetoid, and weeping nodule stages. In healthy patients, orf spontaneously regresses over a 4- to 6-week period. Atypical presentations have been reported in immunosuppressed patients.

CASE REPORT

A 48-year-old man with a history of a liver transplant on immunosuppression with mycophenolate mofetil and tacrolimus presented with a 6-week history of a rapidly growing, painful nodule on his left third finger. Initial trauma occurred with a knife injury while cooking, which then quickly turned into a painful, bleeding nodule. He underwent shave removal by his primary care physician 2 weeks before his dermatology appointment.

At the time of presentation to our clinic, the nodule had returned and was twice its original size. He had associated pain in his left wrist and elbow. Examination found an exophytic, ulcerated tumor with hemorrhagic oozing on the dorsal aspect of the left third finger (Fig 1). There was epitrochlear lymphadenopathy on the left side. Shave removal was performed, and the base was cauterized.

Histologic examination found pseudoepitheliomatous hyperplasia with an underlying edematous, highly vascular dermis. The epidermis was notable

for balloon cell change with reticular degeneration and numerous intracytoplasmic eosinophilic inclusion bodies consistent with orf (Fig 2).

Upon further questioning, the patient admitted to visiting a local sheep farm and cooking lamb at the time of the initial knife injury. The patient had observational treatment after the shave removal. A small area started to recur 3 weeks after shave removal, and topical imiquimod was added. The lesion was completely resolved at 9-week follow-up (Fig 3).

DISCUSSION

This case shows an atypical, exaggerated presentation of orf as an important reminder for clinicians that immunocompromised patients can have exuberant and uncommon presentations of common problems.

In healthy patients, orf tends to be a self-limited disease with low patient morbidity. However, in immunocompromised patients, there are reports of atypical, persistent, recurrent, and giant orf. These cases most commonly relate to posttransplant immunosuppression. Some reports describe giant pyogenic granuloma-like lesions similar that in our case.^{1,2} Although treatment is not typically needed for orf, the persistence and severity of lesions in immunosuppressed patients necessitates a method for quicker resolution. Imiquimod cream has reported success.^{2,3} Other suggested treatment modalities include reduction in immunosuppression, cidofovir cream, oral acyclovir, intralesional interferon, idoxuridine, and excision.¹⁻³ In our patient,

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Fig 1. Orf on left third finger, initial presentation. There is an exophytic, friable, ulcerated tumor with hemorrhagic oozing and a well-circumscribed rim of scale.

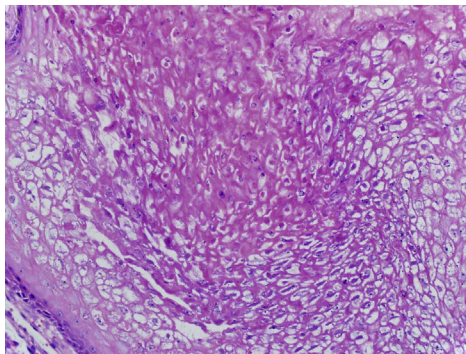


Fig 2. Histopathology findings of Orf. Histology shows balloon cell change with reticular degeneration and numerous intracytoplasmic eosinophilic inclusion bodies. (Hematoxylin-eosin stain; original magnification: $\times 20$.)

treatment with shave excision followed by imiquimod cream when the lesion recurred led to prolonged resolution.

Clinicians should be aware of the prolonged and exaggerated presentation of orf in immunosuppressed

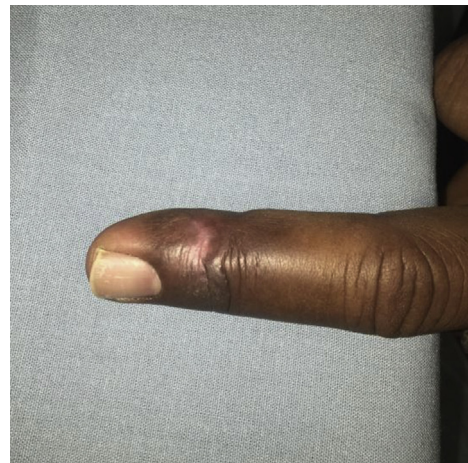


Fig 3. Left third finger, 9-week follow-up. Complete resolution following excision and imiquimod.

patients and the impact that it can have on a patient's quality of life.

Although treatment is typically not necessary in healthy patients, the amplified nature of the disease in immunocompromised patients may necessitate more aggressive therapy. The best treatment course is not yet elucidated, but treatment with various topical and injected antiviral medications may be beneficial.

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