

An ulcerated nodule on the forearm of a shepherd

Xiujuan Jia MD, Hongxia Yan MMed, Qiri Mu MMed

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A 58-year-old man who lived in northern China presented to the dermatology clinic with an asymptomatic cutaneous lesion on his right forearm that had been present for at least a month. He was a shepherd, and reported that some of his sheep had developed cutaneous lesions around their mouths 6 weeks previously. When we examined him, we saw an erythematous ulcerative lesion of 1.2 cm in diameter (Figure 1). We swabbed the lesion for a polymerase chain reaction test for orf virus, which returned a positive result. We diagnosed orf virus infection. We did not prescribe any treatment, but instructed the patient to keep the lesion clean. When we saw him 2 months later, the lesions had resolved, and no new lesions had developed.

The orf virus is a DNA virus that belongs to the *Parapoxvirus* genus of the *Poxviridae* family. Sheep and goats are its natural hosts. Orf virus infection in humans almost always occurs when broken skin comes in contact with an infected animal or contaminated equipment. The incidence of human infection with orf in Canada is not known, but in a farming community from the United Kingdom, about 30% of sheep workers reported having been infected.¹⁻³ Orf virus infection in humans typically presents as a solitary, asymptomatic lesion on the fingers, hands or forearms. Diagnosis can usually be made clinically; some farmers are aware of the manifestations of the disease and may not seek medical care. The use of nonporous gloves when handling sheep or goats protects against infection. Mpox, cowpox, herpetic whitlow and milker's nodules (also known as pseudocowpox, caused by the *Paravaccinia* virus) should be considered in the differential diagnosis. Orf virus infection almost always resolves spontaneously, and no drugs have been approved for its treatment. Wound care may be required.

References

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Figure 1: Photograph of the right forearm of a 58-year-old man with orf virus infection, showing a solitary, erythematous, ulcerated, nodular lesion with a diameter of about 1.2 cm with a pit in the centre, and a second, smaller lesion caused by scratching.

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The authors have obtained patient consent.

Affiliations: Inner Mongolia People's Hospital (Jia); Department of Dermatology (Yan, Mu), International Mongolian Hospital of Inner Mongolia, Hohhot, China

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Correspondence to: Qiri Mu, muqiri28@163.com