

## A cutaneous lesion

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A 34-year-old man presented to dermatology clinic with a lesion on his left palm. The lesion was first noticed 2 weeks before presentation as a nodule with gradual enlargement, accompanied by pain. There was no pruritus or bleeding. He was a shepherd with no prior past medical history. On physical examination, the patient had a 1 × 1.5 cm punched out lesion with peripheral purple discoloration on the medial side of the hypothenar region accompanied by erythema and swelling of surroundings (Fig. 1). Except for a mild fever, there were no other abnormal findings including lymphadenopathy. Routine blood test for tularemia and culture of specimen obtained by skin biopsy ruled out *Bacillus anthracis*. The histology was consistent with the diagnosis of “orf” that was confirmed later by polymerase chain reaction (PCR).

Orf (also known as ecthyma contagiosum) is a worldwide, parapoxvirus zoonotic infection [1]. Contacts with infected animals or contaminated fomites such as barn doors, fences, or shears can spread the virus to humans [2, 3]. After an incubation period of less than 4 weeks, symptoms appear mostly as skin lesions usually in the hands. It can be itchy or painful, and is sometimes accompanied by lymphadenopathy and systematic manifestations [4]. Differential diagnoses are cutaneous anthrax



**Fig. 1** A punched out lesion with peripheral purple discoloration on the hypothenar region accompanied by erythema and swelling of surroundings

and tularemia [5]. Orf can be differentiated by skin biopsy and PCR (a non-invasive and pathognomonic method in orf diagnosis). In most cases, the lesions are spontaneously resolved without scarring over 6–12 weeks [2]. Severe disease with atypical lesions and protracted course of illness can be seen in immunocompromised individuals [5]. The latter patients need to be treated with antiviral agents [2].

No antiviral agent or antibiotic was prescribed for the patient, and the lesion healed spontaneously without scarring within 5 weeks.

**Conflict of interest** None.

**Statement of human and animal rights** All procedures performed in studies involving participants were in accordance with the ethical standards of the instructional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or

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comparable ethical standards. This article does not contain any studies with animals performed by any of the author.

**Informed consent** The patient's consent has been obtained.

## References

1. Lederman ER, Green GM, DeGroot HE et al (2007) Progressive ORF virus infection in a patient with lymphoma: successful treatment using imiquimod. *Clin Infect Dis* 44(11):e100–e103
2. Kitchen M, Muller H, Zobl A et al (2014) ORF virus infection in a hunter in Western Austria, presumably transmitted by game. *Acta Derm Venereol* 94(2):212–214
3. Nougairede A, Fossati C, Salez N et al (2013) Sheep-to-human transmission of Orf virus during Eid al-Adha religious practices, France. *Emerg Infect Dis* 19(1):102–105
4. Bassioukas K, Orfanidou A, Stergiopoulou CH et al (1993) Orf. Clinical and epidemiological study. *Australas J Dermatol* 34(3):119–123
5. Ara M, Zaballos P, Sanchez M et al (2008) Giant and recurrent orf virus infection in a renal transplant recipient treated with imiquimod. *J Am Acad Dermatol* 58(2 Suppl):S39–S40