

Unusual Presentation of Orf in an Otherwise Healthy Individual

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Sir,

Orf is a common parapoxvirus infection of sheep and goats that can be transmitted to humans by direct inoculation of infected material. In humans, a solitary (or in some cases, a few) small, firm, red or reddish-blue papule enlarges to form a flat-topped haemorrhagic pustule or bulla, typically 1–3 cm in diameter, but sometimes as large as 5 cm in diameter. There may be mild fever, malaise and regional adenitis. Spontaneous recovery normally occurs in 3–6 weeks. Unusual presentations, such as giant orf, primarily in immunosuppressed individuals, or widespread, papulovesicular or bullous lesions have been reported. We report here an unusual case of orf in an otherwise healthy young woman. She presented with multiple haemorrhagic pustular nodules, 1–1.5 cm in diameter in an area of 10×8 cm.

CASE REPORT

A 24-year-old woman from the Faroe Islands developed 10–15 firm reddish-blue nodular tumours grouped on her left thigh. Prior to the appearance of symptoms, she had been on the Faroe Islands for a week and had vaccinated around 200 sheep. She had also played football and received an abrasion on her left thigh. The day after her return to Denmark she noticed a swelling, erythema and mild pain in the injured area on her left thigh. In addition she developed mild fever (37.7–38.0°C) and malaise. She was treated initially with erythromycin by her general practitioner for the infection, and later with dicloxacillin and penicillin, all with no effect. She was then referred to a dermatologist, where she was treated for pyoderma gangrenosum with prednisolone. Due to progress of the symptoms she contacted the casualty department at the hospital and was examined by an orthopaedic surgeon, who planned for possible operation the next day. She was finally referred to our dermatology department and at admission she presented 10–15 haemorrhagic pustular nodules in a 10×8 cm area on the left thigh (Fig. 1). Each nodule had a diameter of approximately 1–1.5 cm and was elevated around 1 cm from the surface. In addition, regional adenitis was observed. Her fever had subsided and she showed no other obvious signs of disease. Blood samples were normal and showed no signs of infection.

The clinical observations and medical history were compatible with the virus infection orf following contact with an infected sheep. Histological examination



Fig. 1. Clinical appearance of atypical orf at admission.

confirmed the diagnosis of orf and revealed vacuolization and necrosis of the epidermal cells and a dense cellular infiltrate in the dermis consisting of histiocytes, lymphocytes, eosinophils and very few neutrophils. Electron microscopy was unfortunately not performed to demonstrate the typical parapox virus particles, but we considered the diagnosis correct as the patient had been in contact with sheep and came from the Faroe Islands, where orf is quite common.

The secondary infection was treated with dicloxacillin for 10 days, otherwise spontaneous recovery was awaited. Spontaneous regression was observed, and after 4 months the lesion has healed with only minor scarring (Fig. 2).



Fig. 2. Clinical appearance after 4 months.

DISCUSSION

Unusual presentations, such as giant orf, and widespread, papulovesicular or bullous lesions have been reported (1–7). Giant orf has been reported primarily in immunosuppressed individuals, but a few cases have been seen in otherwise healthy individuals. The giant orf lesions have typically been described as a single pedunculated tumour, several centimetres in diameter, attached to the skin by a round base of 2 cm diameter (1–5). In reported cases of widespread, papulovesicular or bullous lesions, the patients have been described as having typical orf lesions (1–3) on the fingers, followed some weeks later by widespread, papulovesicular or bullous lesions not resembling the initial orf lesions (6–7). Our patient did not present a single giant orf nodule, but several homogeneous (10–15) nodules 1–1.5 cm in diameter, each in a *single* area of 10×8 cm. In addition, in our patient the orf virus infection was associated with concurrent skin trauma, which is a well-known facilitating factor for orf infection (4). As this case demonstrates, orf can easily be misdiagnosed. One explanation may be that the people who are most likely to be exposed to orf virus

(e.g. farmers, abattoir workers, veterinary surgeons) may be familiar with the infection and thus may decide not to seek medical assistance. As a result, clinicians might not be familiar with orf virus infections, leading to a delay in diagnosis and, potentially, overtreatment with medication or even surgery.

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