



Human Orf

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SUMMARY. Human Orf is an uncommon viral disease acquired through contact with infected sheep and goats. We report five cases of human Orf acquired while preparing mutton. The clinical picture and the management of human Orf are presented. Awareness of the benign nature of the condition is important in preventing ill-advised therapy.

Orf (also known as sore mouth disease, scabby mouth disease, infectious pustular dermatitis, and ovine pustular dermatitis) is an endemic viral disease in sheep and goats caused by a number of the paravaccinia subgroup of pox viruses.^{1,2}

Human Orf (ecthyma contagiosum), an uncommon disease, is acquired through direct contact with the virus, and has been reported in professional workers such as shepherds, sheepshearers and those bottle-feeding motherless lambs,³ butchers, knackers and veterinary surgeons.⁴ A characteristic localised tumoral lesion appears 2 to 3 weeks after the contact, and spontaneously resolves within 4 to 6 weeks.

Case reports

Over a one-year period, 5 cases of human Orf were diagnosed and treated in our hospital (Table 1). There were one male and four females ranging in age from 20-35 years. All the patients were from the North African community, sharing the custom of preparing and cooking mutton. All the patients became contaminated through direct contact with infected mutton not submitted to veterinary control. In all but one case, the lesions were recognised and conservative measures were applied, resulting in healing without a scar. In one patient (case 5), the surgeon was unaware of the disease and excisional biopsy was performed, leaving a scar on the wrist.

Table 1 Case details

Case no.	Sex	Age (years)	Site of lesion	Mode of contamination
1	F	35	Palm of hand (Fig. 1)	Knife
2	F	29	Index finger (Fig. 2A, 2B)	Knife
3	F	29	Tip of nose (Fig. 3A, 3B)	Bone chip projected to nose
4	F	20	Index finger	Knife
5	M	22	Wrist	Teeth of a dead lamb

Discussion

Human Orf is an uncommon disorder, rarely reported in the surgical literature.⁵ Awareness of the entity is important since its course is benign and does not require any specific treatment. Our experience shows that contact with mutton while cooking can be responsible for the disease.

The typical clinical lesion is an exophytic irregular tumour, surrounded by a creamy white area with a purplish-blue periphery (Figs 1, 2, 3). Lymphangitis, lymphadenitis and general malaise with fever can



Fig. 1

Figure 1—Orf nodule in the palm.



Fig. 2

Figure 2—(A) Orf nodule on left index. (B) Healed without scar, two months later.



Fig. 3

Figure 3—(A) Orf nodule on the tip of the nose. (B) Healed without scar, two months later.

accompany the peripheral lesions. Reported complications include superinfection and multiform erythema.¹

Diagnosis is confirmed by pathological examination of an incisional biopsy specimen. Histologic examination shows vacuolisation of cells in the upper stratum Malpighii, resulting in multilocular vesicles. Eosinophilic inclusion bodies can be found in epidermal cells. The dermis contains many newly formed dilated capillaries and a mononuclear infiltrate.⁶ Electron microscopy can help in establishing the diagnosis

but is difficult in later stages of the disease.² Isolation of the virus by tissue culture has proved difficult,⁷ and serum analysis for antibodies is seldom used.

Differential diagnoses include milkman's nodule, pyogenic granulomas, keratocanthoma and malignant tumours. Those unfamiliar with human Orf may misdiagnose such rapidly growing tumour for a malignant tumour, leading to aggressive treatment. In two cases reported in the literature, one finger was amputated for this reason.^{8,9}

Treatment of human Orf is simple: the lesions must

be kept clean; antibiotics are only needed in super-infected cases. Surgical excision of the lesion is contraindicated since the disease heals spontaneously (Figs 2, 3). Only an incisional biopsy is needed for establishing the diagnosis. Some reports suggest that excision of the lesion might be helpful in immunocompromised patients who do not heal spontaneously.^{10,11}

Owing to the particular transmission mode in our cases, veterinary control is mandatory and a simple method of prevention could be to wear gloves while cutting mutton, as was suggested to workers in the meat industry.⁷

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