

## **Case Study: An Orf Case After Feast of Sacrifice** **Vaka Sunumu: Kurban Bayramından Sonra Bir Orf Vakası**

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### **Abstract**

Parapoxviruses -commonly found across the world- are frequent pathogens of sheep and goats, and cause orf lesions in human beings. As physicians, we do not frequently encounter orf lesions. They may be easily confused with fatal lesions such as cutaneous anthrax or neoplasm. So that, they may perform unnecessary surgical and scarring interventions. A case, who was infected from sheep in Faest of Sacriface, was presented in this case report.

### **Özet**

Parapoxviruslar, dünya çapında görülen, genellikle koyun ve keçi patojeni olup, insanlarda orf lezyonuna neden olur. Hekimler lezyonlara sık rastlamazlar. Kutanöz antrax veya neoplazi gibi ölümcül lezyonlarla rahatlıkla karışabilir. Bu nedenle gereksiz cerrahi ve iz bırakıcı müdahalede bulunabilirler. Bu vaka sunumunda, kurban bayramında koyundan enfekte olan bir vaka sunulmuştur.

*Kabul Tarihi: 04.07.2015*

### **Introduction**

Parapoxviruses -commonly found across the world- are frequent pathogens of sheep and goats, and cause orf lesions in human beings (1). Orf lesions are generally seen on hands or forearms after an incubation period of 3 to 7 days. A typical lesion in the form of a small erythematous macule or papule develops into a large nodule characterized by a red center surrounded by a white halo, which is surrounded by erythema. The inflammation in the nodule weeps, and then the nodule ulcerates and cicatrizes. Papilloma may develop before the lesion starts healing. Most infections are self-limiting and regress without scarring (2,3,4).

The lesion is rarely seen in the general population, mostly affecting people handling sheep and goats. As physicians do not frequently encounter orf lesions, they may easily confuse it with fatal lesions such as cutaneous anthrax or neoplasm (2,5). That is why they may perform unnecessary surgical or scarring interventions. In open-access primary care practice, cost-effectiveness and quetenary preventionare main bases (6). Physicians have to choose the most effective and lowest costing therapy and as an old and basic term,

not to harm. We aimed to remind this costless “wait and see” intervention for orf cases.

### **The Case**

A female patient aged 59 presented to the 5<sup>th</sup> Family Medicine Clinic, Afyon with a lesion on her left hand. In her medical history, she was a housewife and living with her own son in the same house. She was illeterate, she has the diagnosis of primary hypertension. She was not taking any drugs, excluding the one for hypertension (amlodipine 10 mg 1x1).

On her physical examination, systemic examination revealed no pathologic findings. Her vital examination was stable, ear nose throat, scalp and extremity examination was relevant with aging but not with a disease. Her cardiac and respiratory and abdominal examination was also normal. One week after the Feast of Sacrifice, a lesion consistent with the above description developed on her hand (Photograph 1). The possibility of orf was considered because of the typical appearance. In accordance with primary healthcare procedures, time was used as a means of treatment, and notreatment was administered. When the patient returned 15 days later for control, the lesion recovered almost fully. (Photograph 2). No laboratory tests or diagnostic radiologic imaging was needed for this case.

**Photograph 1.** Lesion on the patients' hand



**Photograph 2.** The recovered lesion



## Discussion

Skin trauma causes viruses to transmit from animals to human beings (2). However; in this case, there was no history of trauma. In the literature there is no indication of contagion from humans to humans; however, there have been cases that developed reinfection (3). Veterinarians, those shearing, abattoir workers, zoo visitors and the Muslim community in the Feast of Sacrifice are particularly under risk (5). Our case was belonging to this risk group. Turkey is a Muslim country and during Feast of Sacrifice sheep and goats sacrifices for God. So signs of disease in goats and sheep must be traced if one does not want to have these lesions. There occur on the mouth and head of sheep and goats multifocal papillary, verrucous, proliferative and ulcerous lesions, and there are no visible lesions on other parts of the body (7).

Orf is a self-limiting lesion that does not require a specific treatment in immune-competent patients. Antibiotics may be used in case of bacterial superinfection; however, antibiotics do not affect the course of the disease. Oral antibiotics should be used only in proved secondary bacterial infections. Cryotherapy, surgical excision, interferon and 40% topical idoxuridine are the other agents used in orf treatment (8,9). However, in many cases, there is no need for treatment. This case was consistent with literature data; it was self limited and it did not need any treatment.

Histopathology and microscopy may be used to support the diagnosis of parapoxvirus infection. PCR definitely shows the virus. Nevertheless, the history of contact with animals and the typical form of the lesion render these examinations unnecessary. This case was one this kind of typical lesion. So we did not need to any further investigation for diagnosis.

Protection of this disease is simple. Protective, impermeable gloves should be worn to avoid direct contact with lesions. As an additional knowledge, human beings do not develop full immunity against orf and may be infected several times (3). So lesions may appear after resolution of it.

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