

A zoonotic lesion which grows with contact; Orf

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Dear Editor,

Orf (*Ecthyma contagiosum*) is a zoonotic disease caused by parapox viruses and it influences mostly sheep and goat [1], however, the disease can infect people through direct contact with infected animals or with their contaminated waste. The virus is endemic in the World; however, since it is a self-restricting disease, it is rarely reported [2]. It is mostly seen on hands and fingers and rarely on the face [3]. Our purpose in presenting this case is to bring orf disease to mind in multiple lesions seen on hands and to emphasize that intervention to orf lesions can make the lesions worse.

Forty three-year-old male patient referred with a complaint of swollen wounds on both hands which started five days ago. Dermatologic examination of the patient whose anamnesis did not show any characteristics or bite showed a firm, nodular lesion with a diameter of approximately 1,5 cm on the dorsal of middle finger of the right hand and one firm, papular lesions of smaller than 0.5 cm on the index finger of the right hand, dorsal of the right hand and dorsal of the left hand thumb (Figure 1).

Detailed anamnesis showed that all the lesions started almost simultaneously, the patient attempted to drain the lesion on the middle finger of the right hand thinking that it was an abscess and thus it grew faster and became a nodule when compared with other lesions that started simultaneously. His anamnesis revealed that there was a similar lesion on the udder of small farm animals he was breeding.

The laboratory results showed that leukocyte count was normal (neutrophil 45%, lymphocyte 44%, eosinophil 3.2%), biochemistry was within normal limits and CRP was negative. Serology showed syphilis as negative. Orf diagnosis was made with the history of contact with small farm animals and the clinical appearance of the lesions and the patient was left to spontaneous resolution.

The patient was told about the natural course of the disease and he was recommended not to touch the lesion.



Figure 1. Nodular lesion on the dorsal of middle finger of the right hand and one firm, papular lesion of smaller than 0.5 cm on the index finger of the right hand, dorsal of the right hand and dorsal of the left hand thumb

Orf is a zoonose commonly seen in the world. Its incidence increases especially in spring and summer months [4].

Following a 3 to 7 day incubation period, the disease starts as an erythematous maculopapular lesion. Orf lesions recover on their own within three to six weeks, generally without scarring. Clinically, it has six stages, each one lasting almost a week. Maculopapular stage in the shape of erythematous macule or papule, target stage with erythematous nodule with a red ring in the middle and a white ring around, acute stage presenting

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with exudation, regenerative stage coursing with crusting, papulomateous stage with nodule formation and regressive stage when the lesion regresses. Lesions are sometimes alone, sometimes multiple [4, 5]. When the patient referred to us, he was in the first stage. However, since the right hand intervened with the middle finger lesion, he had the appearance of stage two. Secondary immunological reactions such as erythema multiforme are frequently reported with orf disease. In addition, orf infection associated papulovesicular lesions, mucous membrane pemphigoid and bullous pemphigoid have been reported [6].

The diagnosis of the disease can be made with the history of contact with small animals such as sheep and goats and clinical findings. Anamnesis is very important for diagnosis. In addition, showing the virus in the sample taken from the lesion with electron microscope, viral culture and histopathological examination from the lesion can be required for definitive diagnosis. Histopathological findings vary according to the clinical period of the disease. Diagnostic findings are paleness in upper epidermis cells and eosinophilic intracytoplasmic inclusion particles in cells vacuolated with vacuolization and mononuclear cell infiltration which are seen in the second stage of the disease [7].

In definitive diagnosis, herpetic paronychia, milker's nodule, cutaneous anthrax, *Mycobacterium marinum* infection, keratoacanthoma and pyogenic granuloma can be considered [8]. While grouped vesicles and papules can be seen in herpetic paronychia, pyogenic granuloma can be seen in the shape of hemorrhagic purple papule or nodule which grows fast in a few weeks. Keratoacanthoma is characterized with hyperkeratotic skin colored nodule localized especially in sun-exposed areas.

The treatment of orf infection is symptomatic. Milker's nodule is a paravaccinia virus infected from udder and it courses with erythematous nodules on finger. Unlike orf, lesions are multiple [9]. Our case is different since it has

multiple lesions.

This disease, which is in fact more frequent than thought, can sometimes be misdiagnosed. This disease which can recover without any treatment and scarring can sometimes show various complications due to unnecessary treatment and surgical practices. As a conclusion, in patients who refer with wounds on the hand and have contact with small animals such as sheep and goat, orf disease should be considered first. In this disease which has a symptomatic treatment, it should be kept in mind that the lesions can grow much bigger with intervention.

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