Case Report

ORF disease: a case report with images

L Elyamani, Y Almheirat, K Belharti, N Zerrouki, N Zizi & S Dikhaye

Abstract

This article presents the case of a 25-year-old Moroccan male who contracted Orf disease (Ecthyma contagiosum), a common zoonotic viral infection in sheep and goats. The disease, caused by a parapoxvirus, can be transmitted to humans through contact with infected animals. The patient developed painful lesions on his fingers after interacting with a sheep during the Feast of Sacrifice. Diagnosis was clinically established considering exposure history and lesion characteristics. Treatment involved local antiseptics and 2% fusidic acid cream. The lesions resolved spontaneously over a few weeks without functional impairment

Keywords

Ecthyma contagiosum, Orf disease, Sheep

Introduction

Orf disease (Ecthyma contagiosum) is a zoonotic viral infection endemic to sheep and goats. It is a parapoxvirus that can be transmitted to humans through contact with infected animals.[2] The orf virus enters its host via damaged skin. Hands and arms are most commonly affected. We report the case of a 25 year old Moroccan male who presented an orf disease few days after Feast of Sacrifice.

Case presentation

A 25-year-old healthy caucasian male working as a physician, with no medical history, presented to the emergency room with a painful lesion on the dorsal site of his right middle and ring fingers (Figure 1). The patient denied any history of injury or exposure to a similar condition. Approximately 4 days prior to admission he noted blisters (up to 1 cm in diameter) on his fingers that had developed rapidly over 24 hours; About one week prior to his illness he was caring for a sheep for the feast of sacrifice. He was feeding this animal by hand, coming in contact with fluid from its oral lesions.

On physical examination, vital signs and temperature were normal. Bullous lesions up to 1 cm in diameter with purplish discoloration were noted on his fingers with red outer halo with slightly indurated base and clean surface. The nodules were causing discomfort. He was otherwise well with no palpable axillary lymph nodes and no lesions were present elsewhere.

The diagnosis of Orf disease was clinically established, based on the typical presentation and the positive history of exposure. No special treatment was given to the patient, apart from local antiseptics and 2% fusidic acid cream to prevent bacterial superinfection. He was strongly advised to wear gloves when handling his animals and practice proper hand hygiene.

The patient was followed for several weeks until all the nodules disappeared spontaneously, leaving some post-inflammatory hyperpigmentation without any loss of function

Discussion

Orf (or Contagious Ecthyma) is a zoonotic disease, caused by a parapoxvirus and mainly affects sheep and



Figure 1. Bullous lesions up to 1 cm in diameter with purplish discoloration on the fingers with red outer halo,slightly indurated base and clean surface

Lamis Elyamani[1]

Yousef Almheirat[1]

Kaoutar Belharti[1]

Nassiba Zerrouki[1,2]

Nada Zizi[1,2]

Siham Dikhaye[1,2]

[1] Department of Dermatology, Mohammed VI University Hospital of Oujda, Medical School of Oujda, Mohammed First University of Oujda, Morocco

[2] Department of Epidemiology, Clinical Research and Public Health Laboratory, Medical School of Oujda, Mohammed First University of Oujda, Morocco

Correspondence

Lamis Elyamani
Department of Dermatology, Mohammed the VIth University Hospital of Oujda
Morocco
Email:
drlamiselyamani@gmail.com
lamiselyamani12@gmail.com

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goats . Human transmission occurs when non-intact skin comes into contact with contaminated sheep and goat saliva or their dead body. The incubation period varies from 3 to 10 days and then single or multiple lesions evolve, which arise mostly in the hands and face. At the onset of disease, primary lesions are the papules that gradually progress to nodular patterns. The nodules change into tubercule or crusted form within 4-6 weeks.[1]

The diagnosis is clinical based on the notion of contact with sheep and the characteristic clinical appearance. Virus isolation and tissue culture or testing (PCR) are expensive, not widely available and are and not essential for diagnosis.[1] The orf nodule must be differentiated from the milking nodule. The clinical aspect is very similar, but the exclusively bovine contagion of this disease allows to correct the diagnosis.[2]

Usually it is a benign infection and, but can rarely, present with a localized erythema multiforme.[2-4]

Conservative treatment with a local antiseptic is recommended to prevent bacterial superinfection. Cryotherapy or topical cidofovir can be used for large lesions. Low-dose systemic steroids and antihistamines are useful in the treatment of erythema multiforme secondary to orf disease.[1]

Orf disease is a mild viral disease that can cause epidemics after the feast of sacrifice in Muslim countries.

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Statement of Ethics

not required

Conflict of interest statement

The authors declare no conflict of interest

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Declaration of competing interests

Nothing to declare

References

1. Biazar T, Shokri M. Erythema Multiforme as a Result of Orf Disease; a Case Report. *Emerg* (Tehran). 2016;**3**:163–5.
2. Arnaud, J. P., Bernard, P., Souyri, N., Pecout, C., & Dunoyer, J. (1986, January). Localisations de la maladie d'ORF à la main= un faux panaris: Etude de huit observations. *In Annales de Chirurgie de la Main* (Vol. **5**, No. **2**, pp. 129-132). Elsevier Masson
3. Khouna A, Bazouti S, Zerrouki N *et al.* Multiforme erythema complicating an orf. *Our Dermatol Online.* 2019;**10(1)**:68-70.
4. Maman M, Medhioub Y. Echtyma contagiosum compliqué d'érythème polymorphe: à propos d'un cas. *Archives de Pédiatrie*. 2017;**24(12)**:1241–1243.

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