

Case Report

Erythema Infectiosum

Urgent message: Rashes are common in urgent care and taking a careful patient history is important for proper diagnosis of the underlying cause.

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Introduction

Physicians in both primary care and urgent care clinics encounter facial rash quite frequently. Given the high prevalence and variable number of etiologies, it is important to diagnose these patients appropriately so that they can be treated in a timely fashion.

Case Presentation

An 8-year-old male was brought into the family medicine clinic with an erythematous rash on both cheeks that had been present for 2 days (**Figure 1**). Also present was an erythematous rash on both arms, which was noticed just before he came in for this appointment. He had prodromal symptoms of fever, runny nose, and a mild cough for 2 to 3 days. The patient denied any shortness of breath, nausea, vomiting or diarrhea. The patient's mother was very concerned about the rash.

Physical Exam

The patient had an erythematous rash on bilateral cheeks, with classic circumoral pallor. He also had a lace-like reticulated rash on bilateral arms. The rest of the physical exam was normal.

Diagnosis

Erythema infectiosum (Fifth Disease)

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Differential Diagnosis

It is very important to differentiate between viral exanthems that appear in patients in same age group but that are associated with features more varied than just facial rash. Patients with Rubella commonly present with a maculopapular facial rash associated with low-grade fever, swollen glands (suboccipital and posterior cervical), joint pain and non-exudative conjunctivitis.¹ Those with roseola or exanthema subitum present with a facial rash and these conditions are seen in younger infants.²

Other common differential diagnoses of rash include, but are not limited to varicella zoster virus, mumps, impetigo, contact dermatitis, heat rash (prickly heat), eczema and hives.

Discussion

Erythema infectiosum (Fifth Disease) is an infection caused by the human Parvovirus B19. It is most common in children aged 5 to 18 years. Fifth Disease is the “fifth” in a

Figure 1.



Classic “slapped cheek” appearance of a child with erythema infectiosum.

series of viral exanthems found in school-age children.³ The virus is transmitted from person to person, most often through respiratory secretions, but it can also be transmitted through administration of blood products and maternal/fetal transmission.⁴ Initial symptoms of Fifth Disease can include fever, runny nose, and a headache.⁴ Approximately 1 week later, an erythematous rash develops on the patient’s bilateral cheeks, giving a “slapped cheek” appearance.^{3,4} A second “lacy”-appearing rash may develop a few days later on the child’s extremities.⁴ A diagnosis of erythema infectiosum is based on clinical presentation, although laboratory testing for Parvovirus B19 IgM can confirm the diagnosis.^{3,4}

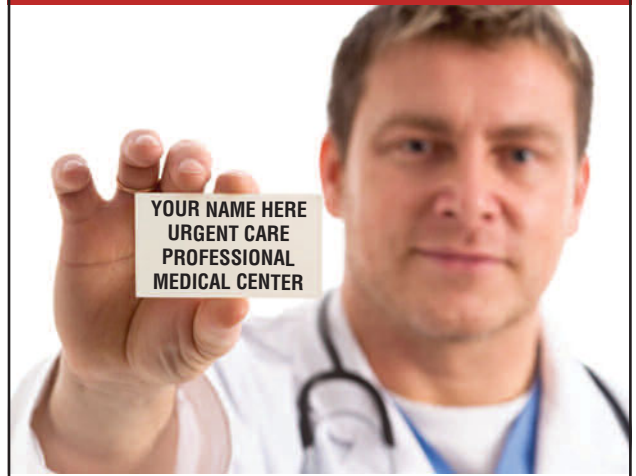
Treatment

Erythema infectiosum is self-limiting and resolves within 1 to 2 weeks.⁴ Treatment is supportive and includes acetaminophen for fever and antihistamines for pruritus. Children should not receive aspirin-containing products because of the risk of Reye’s syndrome. Nonsteroidal anti-inflammatory drugs can be prescribed to adults with arthralgias. Patients should be counseled on reducing the chance of becoming infected with Parvovirus B19 by practicing good hygiene and avoiding close contact with individuals who are sick. Patients with erythema infectiosum are contagious approximately 5 to 10 days after exposure during the viral shedding phase.⁴ Children are not contagious after the rash has developed, therefore, return to school and normal activities is appropriate.⁴ ■

References

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