



## Slapped Cheeks

Vanessa Hum, BAsC; and Simon Lee, MD, FRCPC

A 10-year-old previously healthy boy developed a three-day history of prodromal symptoms including:

- low grade fever,
- sore throat and
- malaise.

Just when his mother thought he was improving, the young boy suddenly developed bright red cheeks associated with a widespread eruption on his upper body. There is no history of drug ingestion.

Examination reveals a well nourished male in no apparent distress. Bright red plaques are noted on both cheeks associated with circumoral pallor and relative sparing of the nasolabial folds. The conjunctivae and oropharynx are clear. Bilateral shotty cervical lymph nodes are palpable. Scattered red papules and plaques are noted on the trunk, forming a lacy pattern. Palms and soles are clear.

*What is your diagnosis?*

- a. Chickenpox
- b. Molluscum contagiosum
- c. Erythema infectiosum
- d. HPV infection
- e. Rocky Mountain spotted fever

*Answer: Erythema infectiosum (EI) (fifth disease)*



Figure 1. Frontal view of cheeks with "slapped cheek" appearance.

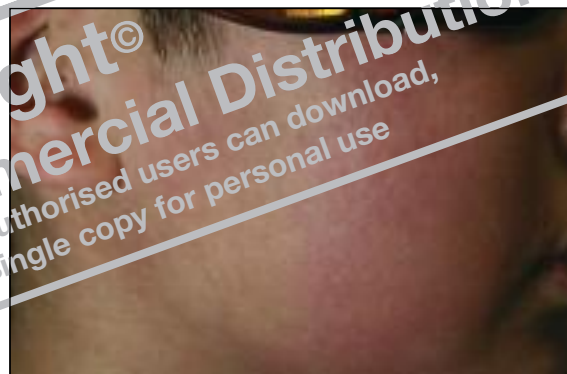


Figure 2. Lateral view with erythema extending to the ears.

### About EI

EI is usually a benign, self-limited childhood illness caused by Human Parvovirus B19. It is also commonly referred to as the "slapped cheek disease" due to its dramatic clinical presentation. Historically, EI is the "fifth" disease in the nomenclature description of the six classic childhood exanthems. They include:

1. Measles
2. Scarlet fever

3. Rubella
4. Duke's disease (existence controversial)
5. EI
6. Roseola

EI is transmitted primarily by respiratory secretions as well as infected blood. The incubation period ranges from one to three weeks. Two-thirds of cases occur in the age group of five- to 15-years-old. There is no sex predilection. Patients are no longer infectious upon appearance of exanthem. Community outbreaks typically occur in the winter time in nurseries and schools. Sporadic cases are infrequent.

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Complications may occur, particularly in high-risk groups. Symmetrical polyarthritis of the small joints (*e.g.*, fingers and feet) may develop, primarily in adults. Vertical transmission of the infection in pregnant women has been linked to hydrops fetalis and spontaneous abortion. In patients with underlying chronic hemolytic anemias such as sickle cell disease, thalassemia or immunodeficiency states such as leukemia, EI infection may trigger aplastic crisis due to cytotoxic destruction of erythropoietic cells in the bone marrow. IV immunoglobulin may be of benefit in these cases.

Fortunately, the majority of patients have an excellent prognosis and recover spontaneously in several weeks to two months time. Treatment is symptomatic and may include bed rest, topical steroid creams and analgesic/anti-inflammatory agents. Cutaneous relapses may occur, aggravated by sunlight exposure and exercise. **Dx**

**Dr. Lee** is a Dermatologist, Richmond Hill, Ontario.

**Ms. Hum** is a Chemical Engineer, Ottawa, Ontario.