Chagas Disease (American Trypanosomiasis)

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Case Presentation

A 33-year-old male, recently returned from a trip to Argentina, was admitted with an ulcer on the left temple, erythematous oedema of the left eyelid, ulcer on the left cheek (Figure 1 A, B), and left preauricular and laterocervical lymphadenopathy. The patient complained of fever (≤38.4°C), headache, arthralgia, and myalgia. A diagnosis of ecthyma gangrenosum was made. Bacteriological examination was positive for *Staphylococcus aureus*. Laboratory tests showed leukocytosis with lymphocytosis and increased erythrocyte sedimentation rate and C-reactive protein. According to antibiogram results, the patient was treated with i.m. ceftriaxone (2 g/day for 10 days). He was seen again two weeks later; however, all symptoms persisted. We then remembered the patient's trip to Argentina, and a diagnosis of Chagas disease (American trypanosomiasis) was hypothesized. Indirect immunofluorescence and ELISA test were positive for *Trypanosoma cruzi* infection. The patient was treated with oral benznidazole (375 mg/day for two months). Complete remission was observed six weeks later. Two-year follow-up was negative.

Teaching Point

Chagas disease is caused by protozoan *Trypanosoma cruzi*. It is endemic in Central and South America. It is usually transmitted by feces of bedbugs of the subfamilies *Reduviidae* and *Triatominae*, in particular *Triatoma infestans*. Reservoirs are wild animals and humans. However, Chagas disease can be transmitted also by blood transfusion, solid organ transplant, and food contaminated by feces of the bedbugs. Acute Chagas disease is characterized by fever, arthralgia, myalgia, and Romaña sign (unilateral erythematous oedema, conjunctivitis, and preauricular lymphadenitis). Benznidazole and nifurtimox are the drugs of choice [1,2].





Figure 1. (A, B) Ulcer located on the left temple, erythematous edema of the left eyelid, and ulcer on the left cheek.

References

- 1. Patel S, Sethi A. Imported tropical diseases. *Dermatol Ther.* 2009;22:538-549. DOI: 10.1111/j.1529-8019.2009.01275.x
- 2. Hemmige V, Tanowitz H, Sethi A. *Trypanosoma cruzi* infection: a review with emphasis on cutaneous manifestations. *Int J Dermatol.* 2012;51:501-508. PMCID: PMC3552304 DOI: 10.1111 *l*j.1365-4632.2011.05380.x