

4CPS-221. CUTANEOUS INFECTION CAUSED BY CORYNEBACTERIUM DIPHTHERIAE: A CASE REPORT

D. González Vaquero¹, J.E. Martínez de la Plata¹, A. Martos Rosa¹, F. Ávila Cabrera¹, M. Aznar García¹, J.A. Morales Molina¹, P. Acosta Robles¹.

¹Agencia Pública Empresarial Sanitaria Hospital de Poniente, Pharmacy Department, El Ejido, Spain.
Correo: diana.gonzalez@ephpo.es

Background

Cutaneous diphtheria is a skin infection caused by toxigenic and non-toxigenic strains of *Corynebacterium diphtheriae*. It is characterized by chronic nonhealing ulcers. Diagnosis may be delayed because it is a rare infection in developed countries. Usual treatment is erythromycin or penicillin, although erythromycin is more effective against penicillin.

Purpose

To describe a case of cutaneous diphtheria caused by non-toxigenic *C. diphtheriae* in VFR (Visiting Friends and Relatives) patient.

Material and methods

Data were obtained by review of the electronic medical records, Pubmed and Uptodate

Results

A 25 years old woman. No known drug allergy. No usual treatment. She is from Guinea Bissau but she lives in Spain since she was 7 years old. She has been on holidays in Guinea Bissau from April to May 2017. Two weeks before her return she had a papular lesion in her left leg and subsequently it was ulcerated. Two days after she returned, she went to the hospital. Progressively similar lesions appeared in both legs, right shoulder and back. Exudate samples from ulcers were taken for microbiological culture and biopsy. In addition, we performed protocol to care for immigrants: Serology for *Strongyloides*, *Treponema pallidum*, *Plasmodium falciparum/vivas/malariae/ovale* and HIV-1/2 were negative as well as PCR for *Loa-loa* and filarias. Skin histology showed eosinophil infiltrates with a central ulceration. PAS/Ziehl-Neelsen stains remained negative. Microbiological culture of ulcer swabs revealed *C. diphtheria* with *Streptococcus pyogenes* group A and methicillin-sensitive *Staphylococcus aureus* superinfection. PCR analysis for *C. diphtheria* toxin was negative. Pharyngeal swab cultures remained negative for *C. diphtheriae*. Patient was treated with erythromycin 500mg/6 hours for 14 days. Topical treatment included daily fusidic acid. Lesions improved progressively with the treatment. Within 2 weeks all skin lesions had completely resolved..

Conclusions

Cutaneous diphtheria was caused by non-toxigenic *C. diphtheria*. It is a highly contagious infection. Due to high vaccination rates it is a quite rare infection in the developed Western countries, but due to the increase of the immigration and refugees in Europe more cases are being seen. Cutaneous diphtheria should be included in the differential diagnosis of patients with skin ulcerations, especially in immigrants..