Letter to the Editor

Neisseria meningitidis cellulitis

Cellulitis, an acute infection of the skin involving the dermis and subcutaneous tissues, is regarded as a serious disease due to its propensity to spread via the lymphatics and blood stream. Although cellulitis is most commonly caused by group A Streptococcus and Staphylococcus aureus, some degree of uncertainty remains about its etiology, mainly because cultures are unavailable in most cases. Herein, we report on Neisseria meningitidis, considering that it is usually overlooked as a possible causative agent of cellulitis.

The spectrum of skin and soft tissue involvement in meningococcal disease is quite broad. It includes a petechial or ecchymotic rash that may evolve to palpable purpura, macular, papular, and pustular lesions, necrotizing fasciitis, cutaneous abscess, and acute cellulitis. Whereas a petechial or ecchymotic rash is an important early diagnostic clue to N. meningitidis infection, cases of meningococcal cellulitis have rarely been described. To our knowledge, as of March 2012, only 15 such cases have been published. Of 15 reported patients, eight were adults and seven children, with a clear female preponderance (13 patients). Host predisposing or underlying factors were evident in six adults (diabetes mellitus, heart failure, steroid treatment, and others), but in none of the children. The site of cellulitis was periorbital in six children and extra-periorbital in all adult patients (extremities, face, neck, and upper chest wall). Bacteremia was present in nine patients and meningitis in only two. The source or types of culture specimens for diagnosis were blood, cerebrospinal fluid, cellulitic area, and conjunctival exudate. Finally, the outcome was favorable under appropriate antibiotic therapy for all except one patient (this patient did not have meningitis).

Meningococcal infection is a protean disease that still challenges clinicians. We believe the present report provides evidence in support of N. meningitidis as an additional cause of cellulitis. In most patients with meningococcal cellulitis a favorable outcome can be reached if the condition is diagnosed and treated in a timely manner.

Conflict of interest: We have neither competing interests nor a funding source to declare.

References


Miguel F. Carrascosa*
Elena Casuso-Sáenz
José Ramón Salcines-Caviedes
Department of Internal Medicine, Hospital of Laredo, Avda Derechos Humanos s/n, 39770 Laredo, Cantabria, Spain

*Corresponding author. Tel.: +34 942 638500; fax: +34 942 607876
E-mail address: miguel.carrascosa@scsalud.es (M.F. Carrascosa)

Corresponding Editor: Timothy Barkham, Tan Tock Seng, Singapore

26 March 2012

1201-9712/$36.00 – see front matter © 2012 International Society for Infectious Diseases. Published by Elsevier Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.ijid.2012.04.014