Scientific letter

Septic Limb Necrosis, Secondary to a Brown Recluse Spider Bite

Necrosis séptica de miembro inferior secundaria a picadura de araña reclusa parda

Brown recluse spider (Loxosceles reclusa) bites are uncommon in our setting, but it is important to consider the possibility of these lesions in the differential diagnosis of cellulitis because they can lead to fatal consequences. We present a case of avascular necrosis of a lower extremity secondary to a brown recluse spider bite in Spain.

The patient is a 43-year-old male with no prior history of interest who came to our emergency room due to symptoms of pain in the right foot with Celsus signs after an arachnid bite within the previous 48 h. Associated symptoms included fever, nausea, vomiting, arthralgia, headache and dark urine. Physical examination confirmed fever of 38°C, choluria, and normal remaining vitals. There was a papular lesion in the interdigital space between the 4th and 5th toes of the right foot associated with incipient cellulitis on the dorsal side of the foot (Fig. 1). Lab workup showed: 29,720 leukocytes/μl (85% polymorphonuclear); PCR 14.7; lactate 1.1; CPK 138; urea 32; creatinine 0.98; other parameters were normal. Chest radiograph was normal. Doppler ultrasound of the lower extremities was normal.

The patient was hospitalised for treatment with antibiotic therapy (amoxicillin–clavulanate) and local treatment (elevated limb, local cooling, compression). After 24 h, the cellulitis progressed along the anterior side and completely surrounded the leg by the 4th day. Afterwards, a large blister appeared, measuring 15 cm × 5 cm and encompassing the dorsal side of the foot, along with necrosis of the skin and subcutaneous cell tissue, accompanied by lymphangitis (Fig. 2). Vancomycin was initiated to widen the spectrum of coverage, which led to theoretical and clinical improvement that was slow but favourable; the cellulitis progressively diminished and the patient was discharged on the 12th day. In later follow-up office visits, the patient has been asymptomatic, with maintained strength and mobility.

Please cite this article as: Guilleñ-Paredes MP, Martinez-Fernández J, Morales-González Á, Pardo-García JL. Necrosis séptica de miembro inferior secundaria a picadura de araña reclusa parda. Cir Esp. 2016;94:e13–e15.
indicate it, others believe that it can favour the progression or development of necrosis. In case of systemic toxicity, they have been used to prevent kidney failure and haemolysis. In our case, we did not use corticosteroids due to the patient’s clinical stability.

Surgical treatment of necrotic ulcers is done in the stable phase, without cellulitis, and never in initial stages because early surgical debridement of necrotic ulcers can be associated with their worsened condition and functional limitation of the affected extremity.

Other local measures include: the use of hyperbaric oxygen therapy, nitroglycerin patches and negative pressure therapy, because these have been seen to reduce the size of the necrotic ulcers while increasing the formation of collagen and fibroblasts in the ulcer.

As for the treatment of systemic symptoms, close patient monitoring is recommended in an intensive care unit with scheduled analyses due to the risk for thrombocytopenia, haemolysis, leukocytosis and haemoglobinuria. If any of these conditions developed, intensive volume repletion would be indicated to avoid kidney failure. Molecular biology treatments are still in experimental phase, but we cannot rule out that an antidote for L. reclusa may be obtained in the future.

We conclude that brown recluse spider bites should be suspected in a patient with cellulitis after a bite. Anamnesis is of vital importance for diagnosis, as loxoscelism can be fatal as there is no specific treatment.

Conflict of Interests

We declare that there was no conflict of interests.

REFERENCES

3. Pereira MJ. Se desata en Sevilla una ola de aracnofobia; 2014, May. ABC de Sevilla [online journal]. Available at: http://sevilla.abc.es/sevilla/20140514/ sevi-desata-sevilla-aracnofobia-20140514093.html [accessed 17.06.14]

María Pilar Guillén-Paredes*, Josefa Martínez-Fernández, Álvaro Morales-González, José Luis Pardo-García

Servicio de Cirugía General y Digestiva, Hospital Comarcal del Noroeste, Caravaca de la Cruz, Murcia, Spain

*Corresponding author.
E-mail address: magirapi@hotmail.com (M.P. Guillén-Paredes).

2173-5077/
© 2014 AEC. Published by Elsevier España, S.L.U. All rights reserved.