ARTICLE IN PRESS

Journal of Infection and Public Health (2016) xxx, xxx-xxx





http://www.elsevier.com/locate/jiph

Probable case of spotted fever group rickettsial infection in a new suspected endemic area, Colombia

Carlos H. Gómez-Quintero^a, Álvaro A. Faccini-Martínez^{b,*}, Carlos A. Botero-García^c, Marcela Lozano^a, Liliana Sánchez-Lerma^d, Jorge Miranda^e, Salim Mattar^e, Marylin Hidalgo^f

^a Grupo de Enfermedades Infecciosas, Clínica De La Mujer, Bogotá, Colombia

- ^b Programa de Pós-Graduação em Doenças Infecciosas, Centro de Ciências da Saúde,
- Universidade Federal do Espírito Santo, Vitória, Brazil

^c School of Medicine, Universidad Militar Nueva Granada, Bogotá, Colombia

- ^d Facultad de Medicina, Universidad Cooperativa de Colombia, Villavicencio, Colombia
- ^e Instituto de Investigaciones Biológicas del Trópico, Montería, Colombia

^f Departamento de Microbiología, Pontificia Universidad Javeriana, Bogotá, Colombia

Received 15 June 2016; received in revised form 10 August 2016; accepted 19 August 2016

KEYWORDS *Rickettsia*;

Rickettsia infections; Spotted fever group; Colombia **Summary** Spoted fever group (SFG) rickettsioses are actually considered as emerging and re-emerging zoonotic diseases, caused by pathogenic bacteria of the spotted fever group rickettsiae (SFGR). Recently, serologic studies in human and animals conducted in Colombian Orinoquia, showed a high seroprevalence against SFGR. In June 2015, a 50-year-old male was admitted to a hospital in Bogotá, Colombia, with two days of malaise and temperature of 39 °C, associated to generalized rash 24 h after the onset of fever. He referred a work visit and outdoor activities in rural area of the Department of Meta 15 days prior the onset of symptoms. The patient was transferred to the intensive care unit with supplementary oxygen, inotropic support and was assessed by the infectious diseases department, indicating the addition of Doxycycline. After seven days of antibiotic treatment the patient was discharged with no evidence of new symptoms or sequels. Retrospectively, two serum samples collected during the acute and convalescent phase were evaluated; there was four fold rise in titer against SFGR. With the foregoing, associated with the

* Corresponding author at: Universidade Federal do Espírito Santo, Av. Marechal Campos, 1468, Maruípe, Vitória, ES, Brazil. *E-mail address:* afaccini@gmail.com (Á.A. Faccini-Martínez).

http://dx.doi.org/10.1016/j.jiph.2016.08.012

1876-0341/© 2016 King Saud Bin Abdulaziz University for Health Sciences. Published by Elsevier Limited. All rights reserved.

Please cite this article in press as: Gómez-Quintero CH, et al. Probable case of spotted fever group rickettsial infection in a new suspected endemic area, Colombia. J Infect Public Health (2016), http://dx.doi.org/10.1016/j.jiph.2016.08.012

C.H. Gómez-Quintero et al.

recent serological evidence that suggests the circulation of SFGR species in the Colombian Orinoquia, we consider to recognize this region as a new endemic area for SFG Rickettsioses.

 $\ensuremath{\mathbb{C}}$ 2016 King Saud Bin Abdulaziz University for Health Sciences. Published by Elsevier Limited. All rights reserved.

Case report

Spotted fever group (SFG) rickettsioses are actually considered as emerging and re-emerging zoonotic diseases, caused by pathogenic bacteria of the spotted fever group rickettsiae (SFGR), transmitted to human beings through tick bites [1]. In Colombia. to date, Rickettsia rickettsii has been the only species of the SFG identified in human cases as well as in Amblyomma patinoi ticks [2,3], being the central region (Department of Cundinamarca) and northwestern Colombia (Departments of Cordoba and Antioguia) known as endemic areas for such rickettsiosis [4-6]. Recently, serologic studies in human and animals conducted in Colombian Orinoquia (Departments of Arauca, Casanare, Guaviare, Meta and Vichada), showed a high seroprevalence against SFGR [7,8].

In June 2015, a 50-year-old male without previous medical history, was admitted to a hospital in Bogotá, Colombia, with two days of malaise and temperature of $39 \,^{\circ}$ C, associated to

generalized rash 24h after the onset of fever. He referred a work visit and outdoor activities in rural area of the municipality of Puerto Gaitán (Department of Meta, Eastern center region of Colombia) 15 days prior the onset of symptoms. He denied contact with animals, insect bites or contact with stagnant waters. Physical examination revealed good general condition, temperature of 38°C, heart rate of 95 beats/min, respiratory rate of 18 breaths/min, no conjuctival suffusion, oropharynx with enanthem, no lymphadenopathy, cardio-pulmonary exam without alterations, abdomen without visceromegalies, no meningeal signs, maculopapular rash on the trunk and extremities with involvement of palms and soles (Fig. 1, Panel A and B) and absence of inoculation eschar.

Initial blood analysis showed leukocytosis (13,970 cells/ μ L), neutrophilia (92.8%), thrombocytopenia (142,000 platelets/ μ L) and elevated transaminases (AST [99 U/L], ALT [118 U/L]), PCR (16 mg/L) and procalcitonin (2.1 ng/mL). The patient was hospitalized and started Ceftriaxone



Figure 1 Probable case of spotted fever group rickettsial infection in a Colombian patient. Maculopapular rash on the trunk (A) and extremities with involvement of palms (B) and soles.

Please cite this article in press as: Gómez-Quintero CH, et al. Probable case of spotted fever group rickettsial infection in a new suspected endemic area, Colombia. J Infect Public Health (2016), http://dx.doi.org/10.1016/j.jiph.2016.08.012

2

Download English Version:

https://daneshyari.com/en/article/5672806

Download Persian Version:

https://daneshyari.com/article/5672806

Daneshyari.com