

y fue dado de alta a las 2 semanas de su ingreso, completamente asintomático.

El resultado negativo de las PCR en las muestras de los 2 pacientes puede explicarse por la demora en la toma de la muestra, ya que es al comienzo de la enfermedad cuando mayor rendimiento se obtiene con las técnicas moleculares.

En ambos pacientes se realizó estudio serológico de *Brucella*, *Rickettsia*, *Coxiella*, herpes, Lyme G y Lyme M, y los resultados fueron negativos.

Teniendo en cuenta la proximidad al continente africano, donde el virus es endémico, y por ser lugar de paso de las aves migratorias, el sur de España es una de las zonas donde se centra un plan de vigilancia de la encefalitis del virus del Nilo Occidental. Estudios realizados para conocer la seroprevalencia de infecciones por el virus del Nilo Occidental en la población del Sur de España⁴ mostraron una tasa del 0,6% de infección pasada (IgG positiva) y exposición de la población humana al virus en esta zona, aunque nadie desarrolló la enfermedad, datos concordantes con un estudio realizado en el nordeste peninsular, en el que se detectó un 0,2%⁵.

La aparición de estos 2 casos que presentamos de meningoencefalitis en humanos coincide con focos declarados de encefalitis del Nilo Occidental en equinos en la provincia de Cádiz⁶, concretamente 36 caballos afectados de distintas explotaciones ganaderas, de los cuales 8 fallecieron. Creemos que en el caso de las meningoencefalitis linfocitarias, la detección de virus neurotípicos de forma rutinaria, en épocas de actividad del mosquito y en zonas donde se haya declarado algún caso de encefalitis en caballos, ayudará a detectar prontamente los primeros casos humanos y establecer las medidas del plan de vigilancia.

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Rickettsia typhi. A new causative agent of round pneumonia in adults

Rickettsia typhi. Un nuevo agente etiológico de neumonía redonda en adultos

Round pneumonia is an inflammatory illness of the lung parenchyma (usually of infectious origin) presented as spherical or oval-shaped consolidation in chest radiography (CR). This well-known clinical-radiological syndrome is generally thought to be a disease of children, being reported rarely in adults^{1,2}. We report two patients with murine typhus (*Rickettsia typhi*) with a clinical-radiological picture of round pneumonia.

Patient 1: A 58-year-old male who owned cats was admitted to the hospital because of fever, chills, oppressive headache and diffuse abdominal pain in the last four days. Physical exam only revealed moderate tenderness to abdominal palpation. Laboratory tests revealed liver enzymes mildly elevated and thrombocytopenia. CR and thoracic computed tomography (CT) showed a nodule of 2 cm in upper right lobe with adjacent pneumonitis (Fig. 1a). A bronchoscopy was performed but cytological and microbiologic analyses were negative, as well as transbronchial biopsy. Doxycycline was administered, with remission of fever within 48 hours and clinical improvement. Serologic tests for *R. typhi* were positive (IgM 1/40960 and IgG 1/320). Thoracic CT obtained fourteen days after onset revealed resolution of nodular image (Fig. 1b).

Patient 2: A 20-year-old male in contact with a dog presented with a 6-day history of fever up to 39.5 °C, dry cough, arthralgias, myalgias, headache, sweating and vomiting. He showed a macular rash on the trunk and upper limbs without itching. Results of tests revealed aspartate transaminase slightly elevated, mild thrombocytopenia, proteinuria and microhematuria. CR displayed a nodular

lesion in middle lobe. Doxycycline was prescribed and patient's condition improved within 72 hours, disappearing fever and the remainder of symptoms. Serologic analysis for *R. typhi* was positive (IgM 1/10.240 and IgG 1/5120). A CR obtained 14 days after diagnosis was normal.

Round pneumonia is more common in children under 5 years being the lower lobes more commonly affected region. The prevalence in this age group and pulmonary localization is due to anatomical features³. In children, the main agents of round pneumonia are the same as those involved in other radiological forms of pneumonia. In adults, the number of cases is lower and probably their pathogenic mechanisms are different. In addition, the microorganisms involved are less known and possibly geographical differences exist. Anton and colleagues have described the important role of *Coxiella burnetii* infection⁴ and to a lesser extent other atypical pathogens (*Legionella pneumophila*)⁵ as causative agents of round pneumonia in Spain. This statement has also been observed in other European countries where Q fever is common⁶. In recent years, our group has described in the Canaries the existence of a significant number of cases of murine typhus⁷. This disease is manifested by high fever, severe headache, musculoskeletal pain, and occasionally rash. Although the classic form of transmission of *R. typhi* is the bite of fleas, inhalation of contaminated faeces also appears to play an important role. Respiratory involvement is relatively common in this disease⁸. However, radiographic changes occur only around 6% (interstitial pneumonitis, pleuro-pericarditis with pulmonary thromboembolism and alveolar infiltrates with or without pleural effusion)⁸. After a comprehensive review we have only found one case of round pneumonia caused by *R. typhi*⁹. We believe that the description of these cases has a dual interest. On the one hand, we should perform a serological survey, which could prevent unnecessary invasive procedures, in any patient with fever



Figure 1. (A) Thoracic CT showed a nodule of 2 cm in upper right lobe with adjacent pneumonitis. (B) Thoracic CT fourteen days after onset revealed resolution of nodular image.

and nodular images in areas where *R. typhi* infection is high. On the other hand, we should include doxycycline in the empirical

treatment of round pneumonia in adults, pending microbiological results and depending on the geographic area.

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