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Abstract (publication only)

Q fever in adults: review of 48 clinical cases

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Introduction: *Coxiella burnetii* is an enzootic and endemic bacterial pathogen in Spain and causative agent of Q fever. Approximately half of persons infected with *C. burnetii* will remain asymptomatic. The most common clinical manifestation of acute Q fever is a nonspecific and febrile flu-like illness] thus, the diagnosis is challenging and few patients receive appropriate treatment. We describe the clinical and epidemiologic characteristics of 48 patients with Q fever. Methods: From June 2008 to June 2012, an observational, retrospective study was performed of a cohort of cases diagnosed of Q fever at Hospital Universitario Central de Asturias , in Spain. Acute Q fever was defined as fever (>38 degrees C) with clinical findings attributed to infection and positive serologic testing. The serological diagnosis of acute Q fever was made by detection of antibodies against phase II antigen by indirect immunofluorescence assay (IFA) based on a single IFA IgG titer of $\geq 1/128$ o a serological evidence of a fourfold change in IgG between paired serum samples. Chronic Q fever was diagnosed when has serological evidence of IgG antibody to *C. burnetii* phase I antigen IgG $\geq 1/800$ by IFA. Results: A total of 48 cases of Q fever in adults were diagnosed (87.5% males, average age 60 [18] years). Contact with animals was recorded in 33 patients. The most frequents underlying diseases were: cardiovascular disease (27%), chronic lung disease (17%), diabetes (14,6%), chronic kidney disease (12.5%), neoplasm (10.4%), chronic hepatic disease and immunosuppression (4% each). All patients had acute Q fever except one chronic. The main clinical form of presentation was pneumonia (50% cases); fever without focality (37,5%); hepatitis (10,5%), and endocarditis (2%). There isn't significantly differences in sex, or underlying diseases between the different forms of presentation. The average age was significantly higher in pneumonic Q fever group (67[15] vs 53[19], $p=0.011$).. Twenty-seven patients were empirically treated with levofloxacin. The rest didn't receive treatment. No patients dead Conclusions: Q fever is an important and underdiagnosed cause of pneumonia. Among patients infected by *C. burnetii*, infection progresses to chronic Q fever in 1%-2%. The empirical treatment of pneumonia with levofloxacin is specially useful in endemic zones.