

SUMMARY OF THESIS

COSTA, Paulo Sérgio Gonçalves da - **Evidências sorológicas de infecções por *Rickettsia rickettsii*, *Rickettsia typhi*, *Coxiella burnetii*, *Bartonella quintana*, *Bartonella henselae* e *Ehrlichia chaffeensis* em indivíduos sadios e pacientes febris com e sem AIDS da região de Juiz de Fora, Minas Gerais.** Belo Horizonte, 2004. (Tese de Doutorado - Faculdade de Medicina da Universidade Federal de Minas Gerais).

SEROLOGIC EVIDENCES OF *Rickettsia rickettsii*, *Rickettsia typhi*, *Coxiella burnetii*, *Bartonella quintana*, *Bartonella henselae* AND *Ehrlichia chaffeensis* INFECTIONS IN HEALTHY INDIVIDUALS AND FEBRILE AIDS AND NON-AIDS PATIENTS FROM THE REGION OF JUIZ DE FORA, MINAS GERAIS

Rickettsial infections are important emerging and reemerging causes of human and zoonotic diseases worldwide. Except for the spotted fever group rickettsioses, especially *R. rickettsii*, these infections are deemed studied in Brazil despite highly favorable ecologic conditions for such illnesses. This descriptive study was carried out to identify current infections by *Rickettsia rickettsii*, *Rickettsia typhi*, *Coxiella burnetii*, *Bartonella henselae*, *Bartonella quintana* e *Ehrlichia chaffeensis* in 287 febrile AIDS and 439 non-AIDS febrile in and outpatients with several clinical syndromes seen in different medical services from January 2001 to July 2004, in the city of Juiz de Fora, State of Minas Gerais, Brazil. Nine cases of rickettsial infections out 287 AIDS patients (3.1% of the patients) were found, led by *Bartonella* spp. infection with 2.1% occurrence rate. Isolated cases of *R. typhi*, *R. rickettsii* and *E. chaffeensis* (0.34% of the patients) were also found but none of *C. burnetii* infection. Fifty six rickettsial infections out 439 non-AIDS patients gave rise to a 12.8% occurrence rate, led by *R. rickettsii* and *C. burnetii* (16 cases - 3.6% of the patients each) followed by *Bartonella* spp. (13 cases - 3%), *E. chaffeensis* (7 cases - 1.6%) and *R. typhi* (4 cases - 0.9%). Rickettsial infections were diagnosed in 15.7% of sepsis cases led by spotted fever group rickettsioses (13.7%) and in 13.8% of influenza-like cases mostly caused by *R. rickettsii* and *C. burnetii*

(16 cases - 4.6% of the patients each) but also with expressive detection of cases of monocytotropic ehrlichiosis and murine typhus among those with this last syndrome. Taken together the rickettsial infections were the main cause of influenza-like syndromes if depicted from epidemic dengue fever cases and the second cause of sepsis in this study. In the end, rickettsial infections were identified in all studied syndromes. Eleven deaths out 65 rickettsial infections gave rise to a 16.9% lethality rate (16.1% in non-AIDS and 22.2% in AIDS patients). The prevalence of rickettsial infections in a healthy population from the Piau county, Minas Gerais State was also studied. The rates for *R. rickettsii*, *R. typhi*, *C. burnetii*, *B. henselae*, *B. quintana* and *E. chaffeensis* were respectively 1.6%, 1.1%, 3.9%, 13.7%, 12.8% and 10.5%. The seropositivity rate was also analyzed amongst the 726 febrile patients (AIDS plus non-AIDS) and rates of 3.9%, 2.7%, 3.9%, 19.3%, 15.2% and 7.3% were respectively found. Rickettsial infections of different kinds probably have been often occurring in the studied region but have remained uncovered given the very peculiar ways for their proper identification and so representing a serious threat to the local population.

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