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(NON MODIFICARE QUESTA RIGA)

BARTONELLA HENSELAE, A WIDESPREAD, SILENT INFECTIOUS AGENT: SERUM ANTIBODIES PREVALENCE IN WESTERN SICILY

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**ABSTRACT**

**Background and Aims:** to evaluate, in the same geographic area, the seroprevalence of *B. henselae* infection both in children [(observed as in- and outpatients at the 'Children Hospital' of Palermo (Italy))] and in healthy blood donors. Furthermore, the circulation of Bartonella in the natural reservoir (cats) was also studied.

**Materials and methods:** 243 children, living in Sicily (Palermo), affected by various diseases, without clinical features suggesting *B. henselae* infection, together with 122 healthy blood donors were serologically investigated for IgG and IgM antibodies by indirect fluorescent antibody test (IFAT). 120 stray and 62 pet cats were also analyzed only for IgG.

**Results:** among children 25.1% had IgG antibodies to *B. henselae*; 18.5% showed a titer 1:64, 2.4% 1:128, 2.4% 1:256, 0.8% 1:512, 0.4% 1:1024, and, finally, 0.4% 1:5120. Among healthy blood donors 11.4% had IgG class antibodies to *B. henselae*; 9.8% showed a titer 1:64, and 1.6% 1:128. All the human serum samples did not show positive results for *B. henselae* IgM class antibodies. 68.3% of stray cats and 35.4% of pet cats had IgG class antibodies to *B. henselae*.

**Conclusion:** we demonstrated a high frequency of serologic evidence of past *B. henselae* infection, in young Italian children, affected by various diseases, apparently free of any clinical features suggesting *B. henselae* infection. This observation is supported by the high circulation of Bartonella in cats.