

***Bartonella henselae* and *Bartonella quintana* seroprevalence in HIV-positive, HIV-negative and clinically healthy volunteers in Gauteng, South Africa**

Authors:

Anastasia N. Trataris^{1,2}
Lorraine Arntzen¹
Jennifer Rossouw¹
John Freaan^{1,2}
Allan Karstaedt³

Affiliations:

¹National Institute for Communicable Diseases, National Health Laboratory Service, South Africa

²University of the Witwatersrand, South Africa

³Chris Hani Baragwanth Hospital, Bertsham, South Africa

Correspondence to:

Anastasia Trataris

Email:

anastasian@nicd.ac.za

Postal address:

Centre for Emerging and Zoonotic Diseases Special Bacterial Pathogens Reference Laboratory

How to cite this poster:

Trataris, A.N., Arntzen, L., Rossouw, J., Freaan, J. & Karstaedt, A., 2012, '*Bartonella henselae* and *Bartonella quintana* seroprevalence in HIV-positive, HIV-negative and clinically healthy volunteers in Gauteng, South Africa', *Onderstepoort Journal of Veterinary Research* 79(2), Art. #479, 1 page. <http://dx.doi.org/10.4102/ojvr.v79i2.479>

Note:

Proceedings of the Conference of the Southern African Centre for Infectious Disease Surveillance 'One Health' held at the National Institute for Communicable Diseases, Johannesburg, July 2011.

© 2012. The Authors.
Licensee: AOSIS OpenJournals. This work is licensed under the Creative Commons Attribution License.

Bartonella is a genus of opportunistic, Gram-negative bacilli transmitted from animals to human hosts. Bartonellae are newly emerging pathogens that can cause a variety of clinical manifestations in both immunocompromised and healthy persons.

The aims were to determine the IgG and IgM seroprevalences of *Bartonella henselae* and *Bartonella quintana* in immunocompromised and immunocompetent individuals using an immunofluorescence assay (IFA).

A total of 382 HIV-positive outpatients of the Chris Hani Baragwanth HIV-clinic, 382 retrospective residual samples from HIV-negative antenatal patients, and 42 clinically healthy volunteers were tested using a commercially available IFA kit to determine the prevalence of IgG and IgM antibodies to *B. henselae* and *B. quintana*.

The IgM and IgG seroprevalences for the HIV-positive patients were 14% (53/382) and 32% (121/382), respectively, compared to 18% for both IgM (62/342) and IgG (63/342) in the HIV-negative antenatal patients. Similarly, the prevalence for IgM was 17% (7/42) and IgG was 19% (8/42) for the clinically healthy volunteers.

HIV-positivity appears to be a significant risk factor for *Bartonella* infection, compared with healthy subjects. Although IFAs have a high sensitivity for *Bartonella* antibody detection, they have various limitations including cross-reactivity with other closely-related human pathogens.