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ePoster Viewing

Clinical ID: paediatric infections

A prospective study of cat scratch disease in children. Diagnosis and clinical outcome.

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Objectives

Bartonella henselae is the main etiologic agent of cat scratch disease (CSD), an emerging zoonotic disease with a worldwide distribution. Cats are usually asymptomatic carriers that transmit the pathogen to humans by a scratch or bite. It affects primarily children and young adults, causing regional lymphadenopathy (classical form of CSD). The clinical spectrum of the disease is ever expanding and there is an increasing scientific interest for members of the genus *Bartonella*. The aim of the study was to report the efficiency of PCR in different clinical samples to the diagnosis and the clinical outcome of the disease.

Methods

Children admitted to our department with a history of cat scratch, bite or physical contact and lymphadenopathy with or without fever were tested for *B. henselae*. Demographic and clinical data were collected by the time of admission. Blood serum samples were examined by the method of indirect immunofluorescent assay (IFA) and whole blood samples and lymph node specimens when available were tested by PCR.

Results

Sera were found positive by IFA, with an antibody titer between 1/128 and 1/1024. PCR of whole blood was negative in all children irrespectively of the presence of fever at the time of examination or previous antibiotic therapy. *B. henselae* was isolated only from a lymph node specimen, which was collected by surgical procedure. Children with CSD received appropriate PO or IV antibiotic treatment, accordingly to clinical findings. Patients with hepatic or splenic abscesses responded later than those with regional lymphadenopathy. No relapse was reported.

Conclusion

PCR of whole blood did not detect CSD patients. When lymph node biopsy is performed, PCR can be a useful diagnostic tool. The combination of history of cat contact, lymphadenopathy and positive serology remains the cornerstone of the diagnosis of CSD.

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