SEROUS MACULAR DETACHMENT AS AN ATYPICAL SIGN IN CAT SCRATCH DISEASE

DESPRENDIMIENTO SEROSO DE MÁCULA COMO MANIFESTACIÓN ATÍPICA EN LA ENFERMEDAD DEL ARAÑAZO DEL GATO

ASENSIO-SÁNCHEZ VM1, RODRÍGUEZ-DELGADO B2, GARCÍA-HERRERO E2, CABO-VAQUERA V2, GARCÍA-LOYGORRI C1

ABSTRACT

Case report: A 58-year-old woman presented with 0.1 visual acuity in the left eye associated with a serous retinal detachment of the macula as the only ocular manifestation of cat scratch disease. This diagnosis was made by serum antibody titers and the clinical course.

Discussion: Although uncommon, cat scratch disease should be considered in patients with a serous detachment in the macula region of the retina (Arch Soc Esp Oftalmol 2006; 81: 717-720).

Key words: Cat scratch disease, Bartonella henselae, serous detachment in the macula, erythema nodosum, lymphadenopathy.

INTRODUCTION

Cat scratch diseases is an under-diagnosed zoonosis due to it being clinically self-limited and benign in most cases. It involves an infectious process caused by Bartonella (formerly Rochalimaea) henselae, a gram-negative pleomorphic bacillus (1,2). Cats are the natural hosts for Bartonella henselae, with kittens under 1 year old being the biggest risk for transmitting the disease, although it is not known whether this is because of a greater frequency of infection in kittens or...
because it simply reflects their tendency to bite and scratch while playing (1,2). This communication describes a clinical condition of an atypical presentation of the cat scratch disease.

CASE REPORT

A 58-year old patient without relevant family history and with a personal history of arterial high blood pressure controlled with medication for 6 years and 10-day evolution of maxillary sinusitis without specific treatment. She attended the urgency section due to «loss and distortion of eyesight» in the left eye (LE) with several days of evolution. The maximum visual acuity in the RE was of 1 and in the LE of 0.125, extrinsic and intrinsic ocular motility were normal, the slit lamp study did not exhibit pathology. Funduscopy in the RE was normal but in the LE a macular serous detachment was found, extending to the superior and inferior temporal vessels (fig. 1), while the optic nerve and the rest of the retinal parenchyma did not exhibit alterations. The patient referred the cat scratch in the left thigh two weeks before her eyesight was affected (fig. 2). Seven days after our assessment, she developed painful erythematous lesions limited to the lower limbs compatible with nodous erythema which ulcerated within a period of 20-25 days (fig. 3).

Inter-disciplinary counsel was requested for a shared study. The chest X-ray was normal, the paranasal sinus X-ray determined a slight veiling in the left maxillary sinus. Serological studies (ANA, ANCA and achanthiphospholipids) were normal. Serology studies (CMV, VEB, Rickettsias, Toxoplasma, HIV, Lyme and luetic serology) were negative, as was the Mantoux. Hemogram: Leucocytes 20,670, VSG 64 mm 1.ª h, PCR 16.4 mg/L. Serologic levels of IgM vis-a-vis B. Henselae with ELISA were positive with a title of 1:812. The patient was treated with ciprofloxacin (1 gram per day) for 14 days. Four weeks after the treatment the systemic conditions began to revert and the ophthalmological condition was resolved with the LE reaching a VA of 1.

Fig. 1: Two-week macular serous detachment. Note the normal condition of the optic nerve.

Fig. 2: Access points of Bartonella henselae. Erythematous and elevated appearance of the lesion. The area was stiff and with surrounding adenopathies.

Fig. 3: Nodular erythematous lesions in lower limbs in different stages of evolution.
DISCUSSION

The cat scratch disease is a rare infectious disease caused by a bacteria of the Bartonella gender. The slight forms can go unnoticed and resolve without treatment. Therefore, the prevalence of the disease is difficult to establish (1). This disease is the most frequent cause of chronic adenopathies in children and young adults after being in contact with cats or less frequently with dogs. The source of the infection is a cat scratch, bite or lick. *Bartonella Henselae*, responsible for the disease, is found all over the world. Over 60% of cases occur in children (1), and it is frequent to find multiple cases in the same family, particularly those who have a cat, mainly in summer (1). The bacteria has an incubation period ranging between several days to several week, causing the development of regional adenopathies sometimes accompanied by a pseudo-fever condition, with fatigue and high temperature which is normally restricted, but in unusual situations can evolve to a severe systemic disease (hepatosplenomegaly, granulomatous hepatitis, osteomyelitis, encephalitis and pneumonia) or a recurrent disease (1). The ocular involvement occurs in 10% of cases, with the most common being Parinaud oculoglandular syndrome, retinochoroiditis and neuroretinitis. The serous macula detachment as single expression of this disease has been published only on a handful of occasions (3,4). The patient described in this cases exhibited a papillar-erithematous lesion in the inoculation site, followed by an unusual systemic reaction in lower limbs within 3 weeks. We did not find this reaction described in any literature database. In this context, the patient developed at the ocular level a serous macular detachment without involving the optic nerve two weeks after being scratched by a cat infected with *Bartonella henselae*.

The emergence of the ophthalmological condition prior to systemic symptoms is an unusual finding (3). Zacchei et al (4) described a patient with EAG and a serous macula detachment without papillitis or neuroretinitis. In a series of 35 eyes with EAG conditions, Solley W et al (3) presented 7 cases (20%) with serous detachment but, in contrast to our patient, all of Solley’s cases (4) exhibited vitreous inflammation. The diagnostic is based on clinical findings, on the history of exposure to cats and in the positive serological test (1). The disease generally gets cured without needing treatment with antibiotics, although antibiotic therapy can accelerate the recovery.

REFERENCES