

CAT-SCRATCH DISEASE: STILL A CHALLENGE

S. Bota¹; S. Jacinto²; C. Ferreira³; A. S. Santos⁴; L. Varandas¹; C. Gouveia¹

¹Pediatric Infectiology Unit, ²Neurology Unit and ³Oftalmology Unit, Hospital Dona Estefânia, CHLC - EPE, Lisbon, Portugal

⁴Center for Vectors and Infectious Diseases Research, National Institute of Health Dr Ricardo Jorge, Águas de Moura, Portugal

INTRODUCTION

Cat-scratch disease (CSD)-neuroretinitis (CSDN) is an unusual pathology in immunocompetent individuals (1-2% of CSD). It typically presents with sudden vision loss following a febrile illness.

CASE REPORT



10 years old
Healthy
Daily contact with kittens

48 hours

Fever
Headache
Vomits
Abdominal pain
Myodesopsias right eye

One week

Right eye disc swelling
Normal visual acuity
Bilateral cervical nodes

Fever

White cell count $7.5 \times 10^9/L$
C-Reactive protein 139 mg/L
Erythrocyte sedimentation rate 44 mm/h

Lumbar puncture Intracranial hypertension
Raised opening pressure (28.5 mmH₂O)
Normal cytochemical (0.8/uL cells, proteins 10.6)

Brain and orbit MRI with angiogram: normal

HIV, herpesviruses, *Toxoplasma gondii*,
Mycoplasma pneumoniae, *Borrelia burgdorferi*,
Mycobacterium tuberculosis, syphilis and
autoimmune diseases were EXCLUDED

Acetazolamide

Sudden unilateral diminished visual acuity (2/10)
Macular serous detachment, vasculitis

3 months

**Cat-scratch disease
neuroretinitis**

Doxycycline (8 weeks)
Rifampicin (8 weeks)
Methylprednisolone (3 days)

Asymptomatic with 10/10 right visual acuity

- ✓ Lumbar puncture
Normal opening pressure (19 mmH₂O)
Pleocytosis (56/uL)
- ✓ ***Bartonella spp* POSITIVE serology with fourfold decrease in IFA titers:**
1st serum sample IgM 32; IgG 4096
2nd serum sample (4 weeks later) IgM <32;
IgG 512
CSF sample IgG 32
- ✓ Negative DNA amplification in blood and CSF

DISCUSSION

The absence of a macular star does not exclude and should not delay the diagnosis of CSDN. Serology remains the most common test to support the diagnosis. The role of antibiotics with or without steroids is not consensual. Still, patients usually have a favorable visual outcome.

References: SULENE L. "Clinical characteristics in 53 patients with cat scratch optic neuropathy" *Ophthalmology* 2012; 119:183-187; TSUJINO, K. "Clinical implication of prolonged fever in children with cat scratch disease" *J Infect Chemother* 2004; 10:227-233 SUHLER, EB "Prevalence of serologic evidence of cat scratch disease in patients with neuroretinitis" *Ophthalmology* 2000; 107:871; BHATTI, MT; "Macular star in neuroretinitis" *Arch Neurol* 2001; 58:1008



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Author's contact: sofiaarbota@gmail.com; cmfgouveia@gmail.com