

## Lyme-Borreliose, Ko-Infektionen und Augenbefall Lyme disease, co-infections and eye infections

### Strabismus, Myositis, Horner Syndrom, Angiopathie, Neuritis nervi optici, Makuladegeneration etc.

Remember: Centers for Disease Control and Prevention (CDC) **Feeling Worse After Treatment? Maybe It's Not Lyme Disease** <https://www.youtube.com/watch?v=823jkRlaLgA#t=81>

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„... visual acuity of 20/15 in both eyes, and showed no progression of his vascular occlusions or recurrence ... diffuse syphilitic chorioretinitis neuritis papulosa of Fuchs gummatous lesions of retinogummatous lesions originating in optic nerve syphilis of retinal blood vessels ...“  
[Cited by 28 Related articles](#)

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« Any patient who has a Bell's palsy (unilateral or bilateral), aseptic meningitis, chronic fatigue syndrome, atypical radiculoneuropathy, presenile dementia, atypical myopathy, or symptoms of atypical rheumatoid arthritis should be asked specifically about the following: visits to highly endemic areas, any known tick bites, any skin lesion suggestive of erythema migrans, any history of palpitations or of prior Bell's palsy, aching in joints (especially the knees), paresthesias, chronic fatigue and depression, forgetfulness, and eye problems. Any patient showing a chronic iritis with posterior synechiae, vitritis in one or both eyes, an atypical pars planitis-like syndrome, big blind spot syndrome, and swollen or hyperemic optic discs should be asked the same questions. »

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„... Burgdorfer and Barbour isolated a new spirochete, called Borrelia burgdorferi, from the Ixodes dammini tick. ... which may occur also in stage 2) Iritis Pars planitis Vitritis Chorioiditis Panuveitis Retinal vasculitis Exudative retinal detachment Branch retinal artery occlusion skin rash ...“  
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„... Moreover arterial occlusions were observed in two patients. ... Find all citations with this subject(default). Or filter your current search. Optic Neuritis. Formation of new blood vessels originating from the retinal veins and extending along the inner (vitreal) surface of the retina. ...“

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„Optic disk edema with a macular star is a descriptive term encompassing a heterogeneous group of disorders. The clinical features include sudden visual loss, swelling of the optic disk, peripapillary and macular exudates that may occur in a star pattern, and cells in the ...“ [Cited by 30 Related articles More](#)

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“Despite intravenous ceftriaxone therapy borrelia burgdorferi must have survived in the vitreous body. Further investigations are required with respect to the use of other antibiotics or immunosuppressives. »

[Reed JB](#), [Scales DK](#), [Wong MT](#) et al. (1998) [Bartonella henselae neuroretinitis in cat scratch disease](#). Ophthalmology 105(3), 459–466

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„... optic disk edema with a small detachment of the temporal peripapillary retina (Figure 2, E ... optic disk edema associated with serous detachment involving the fovea and occlusion of multiple ...recovery occurred in one patient as a result of multiple branch retinal arteriolar occlusions ...“

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„... One patient had branch retinal vein occlusion (patient 6, Fig 4). One patient with vitreitis had ... There are multiple, small, round, punched-out lesions in the peripheral retina. ... Figure 3. Patient 5. A, fluorescein fundus angiography showing leakage from retinal venules and cystoid ...“  
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[Cunningham Jr ET](#), [Jane E Koehler JE](#) (2000) [Ocular bartonellosis](#) [American Journal of Ophthalmology](#) 130(3), 340–349 <http://www.ajo.com/article/S0002-9394%2800%2900573-0/abstract>

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„The retina and the choroids are richly vascularised structures and can therefore be colonised by germs via the haematogenous route in the course of a systemic infectious disease. The germs responsible for this type of infection can be fungi, viruses, bacteria and parasites. Ocular candidiasis is outstanding amongst these colonisations because of its frequency; it can manifest itself as an endophthalmitis with a slow and hidden course. The so-called ocular histoplasmosis syndrome, although it is infrequent in our setting, is an important cause of choroidal neovascularisation.

The viruses that most frequently affect the retina are of the herpes type and can produce devastating symptoms in immunoincompetent patients, named acute retinal necrosis syndrome. Retinitis due to cytomegalovirus is more frequent in immunodepressed patients, as in the case of AIDS, but it must also be contemplated in patients with lymphoma and immunomodulatory treatment.

The most frequent bacterial diseases that affect the retina are syphilis and tuberculosis. Disease due to cat scratches, caused by a borrelia, can produce a neuroretinitis.

Toxoplasmosis is the most common of the infectious diseases caused by a parasite and gives rise to chorioretinitis. Toxocariasis, also caused by a parasite, is second in importance, giving rise to choroidal granulomas and retinal tractions.“

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Departments of 1Ophthalmology, 2Infectious Disease, Pole Specialty Medecine Ophthalmology Hygiene, and Bacteriology, Hopitaux Universitaires de Strasbourg, Strasbourg, France.

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„Lyme borreliosis can cause a variety of ocular manifestations, and the frequency of these manifestations among cases of Lyme disease involving systemic manifestations is approximately 1%“

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➔ **Horner Syndrom** [http://en.wikipedia.org/wiki/Horner%27s\\_syndrome](http://en.wikipedia.org/wiki/Horner%27s_syndrome)

## **Augenerkrankungen im Zusammenhang mit Tätovierungen, tattoo-associated ocular diseases**

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