Syphilitic Uveitis

Klimova A., Heissigerova J., Rihova E., Brichova M., Jenickova D., Mazna M., Svozilkova P.

Department of Ophthalmology, First Faculty of Medicine, Charles University and General University Hospital in Praque, Czech Republic

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Background

Syphilis is a chronic bacterial infection (Fig.1) with a high incidence in developing countries and increasing incidence in Europe and North America. Syphilis is called “the great imitator” of diseases due to heterogeneous clinical manifestations (Fig.2,3).

Ocular manifestation is rare. However, the early diagnosis and treatment may prevent irreversible neurological and cardiovascular complications and further transmission of this well treatable infection.

Fig.1 Treponema pallidum in electron microscope

Fig.2 Primary syphilis chancre (patient n.7)

Fig.3 Secondary syphilis - alopecia areata (patient n. 9)

Patients and methods

The aim of our study is to present the clinical signs of syphilitic uveitis in our patients (Fig.4-7).

A retrospective study of 11 patients (Tab.1) with ocular manifestation of syphilis (out of 2642 uveitis patients) that have been referred to our Centre for Diagnosis and Treatment of Uveitis in Prague in years 2004-2016.

Results

Patient No.	Sex	Age (yrs) med. = 44	Eye	Diagnosed by	HIV posit.	Manifestation	BCVA basal OD/OS	BCVA final OD/OS	Homosexual
1	male	25	ODS	ophthalmologist	*	neuroretinitis, vitritis	1.0/0.7	?/?	*
2	male	55	ODS	ophthalmologist		neuroretinitis	0.7/hand motion	1.0/1.0	
3	male	34	ODS	ophthalmologist	*	neuroretinitis, vitritis (reinfection)	0.1/finger count	0.7/0.1	*
4	male	40	OD	ophthalmologist		chorioretinitis	1.0	1.0	*
5	male	30	OD	ophthalmologist	*	chorioretinitis, vitritis	0.25	?	*
6	female	30	ODS	dermatologist		vasculitis	0.7/0.5	?/?	
7	male	39	ODS	ophthalmologist		uveitis anterior	1.0/1.0	1.0/1.0	*
8	male	48	OD	dermatologist		neuroretinitis	1.0	?	
9	male	38	OD	ophthalmologist		neuroretinitis	hand motion	1.0	
10	male	44	ODS	ophthalmologist		uveitis anterior	1.0/1.0	1.0/1.0	*
11	male	55	OS	ophthalmologist		vitritis	0.5	1.0	

Tab.1

Signs of anterior uveitis of mild intensity were present also in patients with posterior uveitis with exception of 2 patients (n.2 and 11).

The diagnosis of syphilis was proved in our patients by positivity of VDRL, TPHA and ELISA IgM/IgG, further confirmed by Western blot IgM and IgG. The activity of infection was monitored by VDRL in units and IgM titers.

Neurolues was confirmed by lumbar puncture. Treatment by penicillin G (benzylpenicillin) intravenous or intramuscular one week approximately, followed by 2.4 MIU benzathin penicillin 4 times in a week interval.

The restitution of ocular and dermatological clinical signs of syphilis withdraw in few days on therapy.

Case report 1 (patient n. 4) ⟹ 5 months later

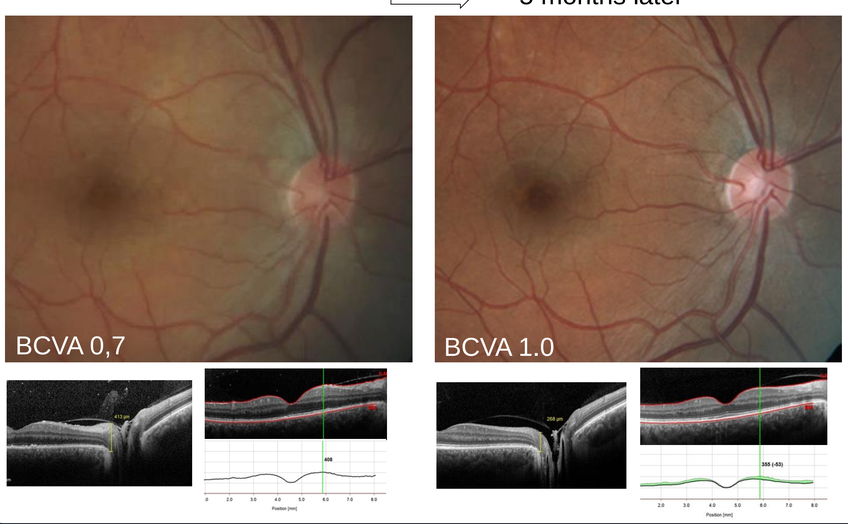


Fig.4 The patient with syphilitic chorioretinitis with discrete hyperemia and papilledema. BCVA improved to 1.0 after one month of therapy. The regression of edema of optic nerve and macula is seen on OCT. This patient was previously treated as m. Behcet for oral and anal ulcerations.

Case report 2 (patient n.7) ⟹ 4 months later

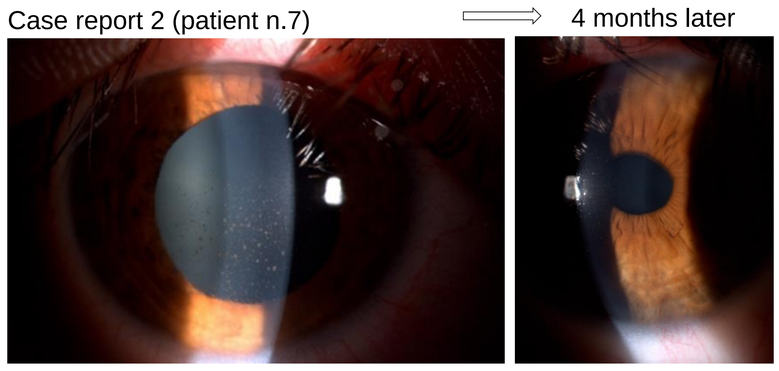
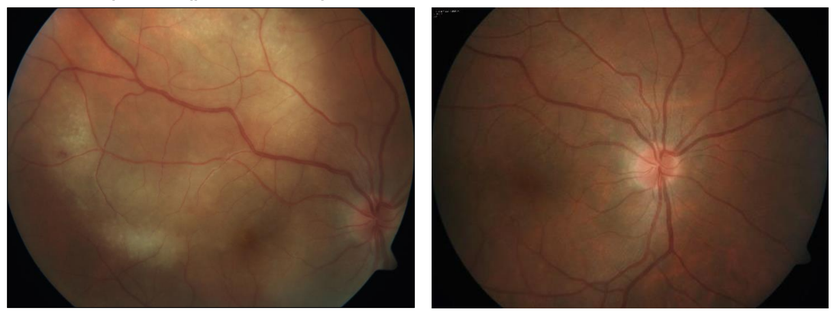


Fig.5 The patient with bilateral anterior uveitis non-responding to local corticosteroid therapy lasting 3 months. He was feeling tired with weightloss in last 3 months, also suffered from mouth ulcerations and skin perianal lesions.

Case report 3 (patient n. 9) ⟹ 5 months later



BCVA hand motion — BCVA 1.0

Fig. 6 The patient with neuroretinitis and acute syphilitic posterior placoid chorioretinitis (ASPPC). The BCVA improved one week after the therapy initiation to 0.5, complete restitution followed 5 months later.

Case report 4 (patient n.11) ⟹ 3 weeks later

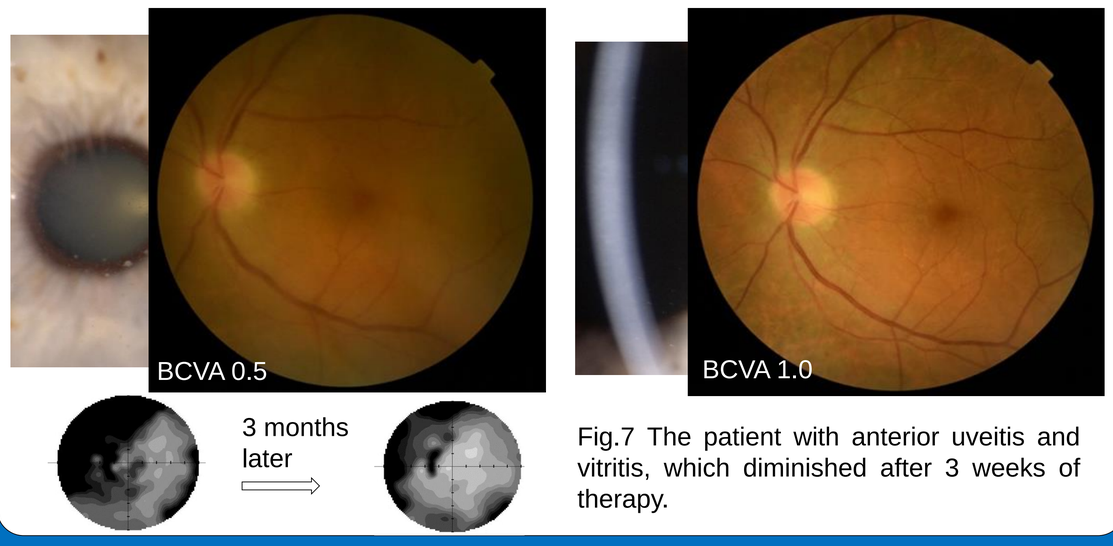


Fig.7 The patient with anterior uveitis and vitritis, which diminished after 3 weeks of therapy.

Conclusion

The screening of syphilis should be considered in differential diagnosis of uveitis that does not respond sufficiently to the anti-inflammatory therapy.

The early diagnosis could withdraw other unnecessary examinations and early treatment brings very fast results. The actual serological diagnostics are highly sensitive. The systemic treatment is managed by venereologist.

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