Contents lists available at ScienceDirect

IDCases

journal homepage: www.elsevier.com/locate/idcases

Case study Ocular involvement with secondary syphilis in a non-HIV infected man



Takahiro Matsuo*, Nobuyoshi Mori, Keitaro Furukawa, Keiichi Furukawa

Department of Infectious Diseases, St. Luke's International Hospital, 9-1, Akashi-cho, Chuo-ku, Tokyo 104-8560, Japan

A R T I C L E I N F O

Keywords: Secondary syphilis Optic neuritis

A 65-year old human immunodeficiency virus (HIV)-uninfected man presented to the ophthalmology department with 3-week history of progressive deterioration of his right eyesight and a visual field abnormality. He also complained of 3-month of a painless ulcer on his dorsal penile shafts with 3-week of diffuse, symmetric skin erythema involving his entire trunk, bilateral palms and soles. His serum Venereal Disease Research Laboratory titer was 1:64 and Treponema Pallidum Hemagglutination (TPHA) titer was 1:5120. Examination of the cerebrospinal fluid revealed normal cell count of $3/\mu$ L, and glucose of 65 mg/dL, but slightly elevated protein of 52 mg/dL and positive TPHA of 1:8. Ophthalmologic examination demonstrated right papilledema and optic disk hemorrhage with leakage of contrast medium that was compatible with optic neuritis (Fig. 1). In addition, magnetic resonance imaging showed edema of his right optic nerve (Fig. 2).

Optic neuropathy can occur in secondary syphilis, although it is likely underestimated as it may be overlooked [1]. Ocular syphilis is less common in HIV-uninfected healthy patients compared to those with HIV infection [2], but clinicians should be aware that the presence of diminished visual acuity in syphilitic patients is strongly suggestive of central nervous system involvement [3]. Syphilic optic neuritis can proceed to rapid visual dysfunction [4]. Our patient was treated with penicillin G 4 million units intravenously every 4 h for 14 days along with oral prednisolone 1 mg/kg daily, and his skin lesions and visual disturbance gradually improved. As delayed diagnosis can lead to irreversible visual loss, early assessment and treatment is of paramount importance [5].

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.



Fig. 1. Ophthalmologic exam revealed right papilledema, optic disk hemorrhage and leakage of contrast medium on fundoscopy.



Fig. 2. MRI showing edema of the right optic nerve.

* Corresponding author.

E-mail address: tmatsuo@luke.ac.jp (T. Matsuo).

http://dx.doi.org/10.1016/j.idcr.2017.08.005

Received 12 July 2017; Received in revised form 8 August 2017; Accepted 8 August 2017

2214-2509/ © 2017 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/BY-NC-ND/4.0/).



References

- [1] Di Poggio MB, Primavera A, Capello E, Bandini F, Mazzarello G, Viscoli C, et al. A
- [1] J. Proget and The analysis of the second second
- [3] Smith GT. Neurosyphilis with optic neuritis: an update. Postgrad Med J

2006;82:36-9.

- [4] Prokosch V, Thanos S. Emerging syphilitic optic neuropathy: critical review and recommendations. Restor Neurol Neurosci 2008;26:279-89.
- [5] Tsuboi M, Nishijima T, Yashiro S, Teruya K, Kikuchi Y, Katai N, et al. Prognosis of ocular syphilis in patients infected with HIV in the antiretroviral therapy era. Sex Transm Infect 2016:605–10.