

Episcleritis Associated with Pigmentary Retinal Degeneration in an HTLV-I Carrier

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Human T-cell lymphotropic virus type I (HTLV-I) has been reported as the cause of a kind of endogenous uveitis (HTLV-I associated uveitis; HAU). We observed a case of episcleritis in a HTLV-I carrier with pigmentary retinal degeneration.

HTLV-I infection might be associated with the development of episcleritis and pigmentary retinal degeneration. Patients with episcleritis or pigmentary retinal degeneration should be examined for HTLV-I infection.

key word: Carrier, Uveitis, Episcleritis, Pigmentary Retinal Degeneration

INTRODUCTION

Human T-cell lymphotropic virus type I (HTLV-I) is a newly defined human retrovirus that causes at least two distinct systemic diseases: adult T-cell leukemia [1] and HTLV-I associated myelopathy [2]. This human retrovirus can be transmitted through breast feeding, blood transfusion and sexual contact. The geographical distribution of HTLV-I is clustered in some regions of the globe, i. e. central Africa, Melanesia, the Caribbean islands and southwest Japan [3]. From the worldwide point of view, Japan is a highly endemic area but the geographical distribution is also clustered in one region, the southwest of Japan, which is a small country [4]. HTLV-I also might be related to the development of inflammatory diseases in various organs such as the eyes, lungs and joints [5, 6, 7], and the term "HTLV-I associated complex" has been adopted. HTLV-I has attracted the interest of many physicians around the world. Recently this retrovirus has been recognized to be associated with a kind of endogenous uveitis in southwest Japan [5], and this has become a major topic in international ophthalmology.

This is the first report of an HTLV-I car-

rier with episcleritis and pigmentary retinal degeneration.

CASE REPORT

The patient, a 53-year-old previously healthy man who had no contributory family history, noticed slowly progressive blurred vision and night blindness in both eyes in 1987, and was diagnosed as having pigmentary retinal degeneration. In 1996, he had recurrent ocular hyperemia and slight foreign body sensations in both eyes, and was referred to the Division of Ophthalmology, Odawara Municipal Hospital. On initial ophthalmological examination, his corrected visual acuity was 0.3 in both eyes. Applanation tonometry gave a pressure of 17 mmHg in both eyes. In both eyes, the bulbar conjunctivae showed intense congestion with a moderate amount of serous secretion, but the anterior chambers were clear (Fig. 1). Fundus examination revealed diffuse retinochoroidal degeneration with scattered pigment clumps and yellowish atrophic discs (Fig. 2). Visual field testing revealed severe visual field defects in both eyes. Electroretinograms were barely recordable. Results of systemic examinations were normal except for the high titer (x512) of serum antibody to HTLV-I (PA method; SERODIA:

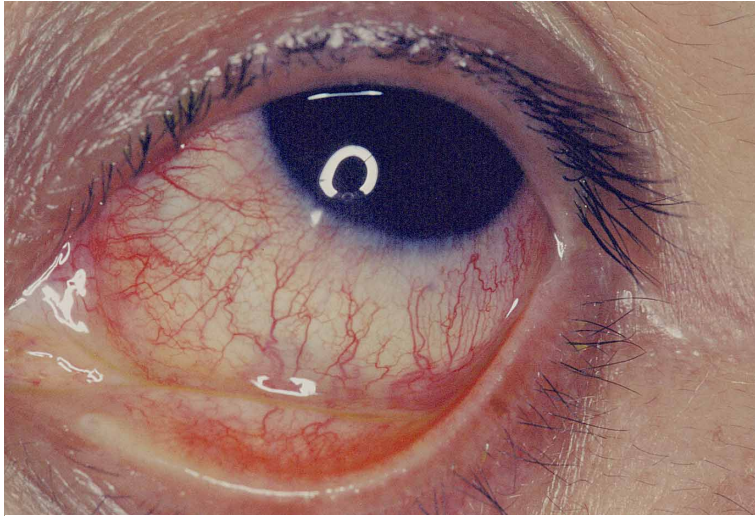


Fig. 1 Photograph of the right eye showing intense hyperemia with a moderate amount of serous secretion.

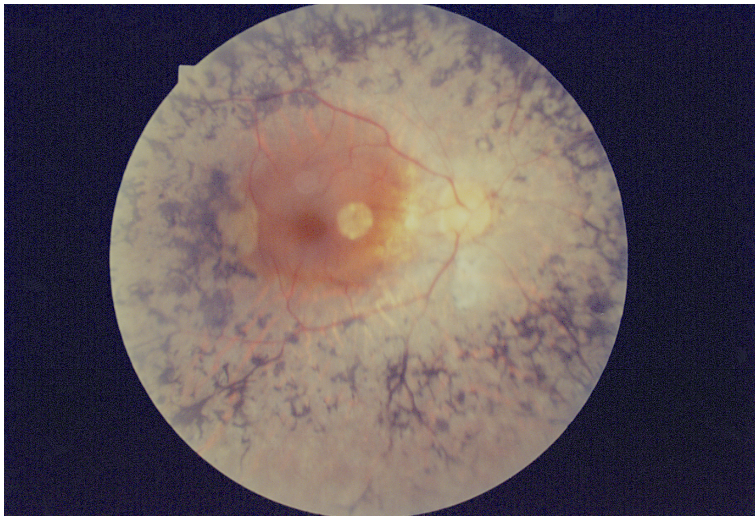


Fig. 2 Photograph of the right eye fundus showing diffuse retinochoroidal degeneration with scattered pigment clumps and yellowish atrophic discs.

HTLV-I, Fujirebio Inc. Tokyo, Japan). The specificity of these antibodies against HTLV-I (not against HTLV-II) was confirmed by evidence of HTLV-I specific proteins (p19, p53, and gp46) using Western blot analysis (Diagnostic Biotechnology; HTLV Blot 2.3). He was diagnosed as having idiopathic episcleritis with pigmentary retinal degeneration, and treated with topical corticosteroids.

The ocular hyperemia responded well to topical corticosteroids, and resolved completely over a few days, but the ocular hyper-

emia recurred several times as the therapy was tapered.

COMMENT

To date, there have been a few reports that indicate an association of HTLV-I infection with episcleritis [8] or pigmentary retinal degeneration [9], but this is the first report on the coexistence of episcleritis and pigmentary retinal degeneration in an HTLV-I carrier. Although the question of whether HTLV-I infection also plays some

roles in the development of these two ocular diseases is not yet answered, HTLV-I infection might be associated with these two conditions. Further studies of HTLV-I infection should make it possible to clarify these causal relationships. Infection with HTLV-I is so uncommon that most ophthalmologists have probably never seen a case of HTLV-I associated ocular diseases. Now however, HTLV-I infection is spreading throughout the world as in the case of human immunodeficiency virus [10]. We therefore recommend that not only patients with uveitis, but all patients with episcleritis or pigmentary retinal degeneration should also be examined for HTLV-I infection regardless of their birthplace.

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