

Herpes and the Eye

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Herpes! The first thought in most people's mind is venereal disease, sexual transmitted disease (STD). But, in fact most instances of herpes, at least those affecting the eye, are not sexually transmitted, and are not even the type of herpes that is usually associated with sexually transmitted disease. The vast majority of instances of herpes infection of the eye are from type 1 herpes simplex virus, the type of herpes virus that causes fever blisters and cold sores. The primary infection is usually acquired during childhood, and there may be no signs or indication of that contraction of the microbe. But the microbe establishes a saprophytic relationship in nerve tissue (ganglion), and lies dormant or latent, in a state similar to hibernation, until provoked to "wake-up," multiply, migrate down nerves and establish clinically obvious infection in the area supplied by that nerve, for example, lip, tongue, or, in some rare instances, the eye.

Ocular manifestations of herpes simplex infections can be in the conjunctiva (conjunctivitis), in the sclera (scleritis), in the cornea (keratitis), inside the eyeball itself (uveitis), or in the retina (retinitis). It is a potentially dangerous process even when it affects just conjunctiva, since infection in this area can in some instances result in spreading or inoculation into the cornea. When the infection involves cornea or the intraocular parts of the eye or the retina, the potential for substantial loss of vision is enormous.

Therefore, proper diagnosis and treatment is critical if one is to preserve good vision and, more importantly, be free of repeated episodes of reactivation of the virus from its latent state and re-establishment of active infection again, and again, and again. Proper therapy during an episode of active, (productive) infection, with rapidly multiplying virus is with the use of antiviral medication, sometimes used just topically, but also sometimes used systemically (by mouth). And just as in the case of the debilitating effects of recurrent episodes of active infection in patients with frequently recurrent genital herpes, so too with herpes infections of the eye the person's life can be literally transformed through the long-term use of prophylactic oral antiviral medication (for example, acyclovir). We first showed this in our care of patients who needed to have corneal transplantation as a result of scarring secondary to recurrent episodes of inflammation in the cornea secondary to herpes simplex virus. We showed that long-term treatment with oral acyclovir resulted in a much higher success rate of the corneal transplants, a much lower rate of recurrence of herpes keratitis, and a much lower rate of irretrievable rejection of the cornea transplant. We have now also shown that this strategy is effective for patients with uveitis secondary to herpes.