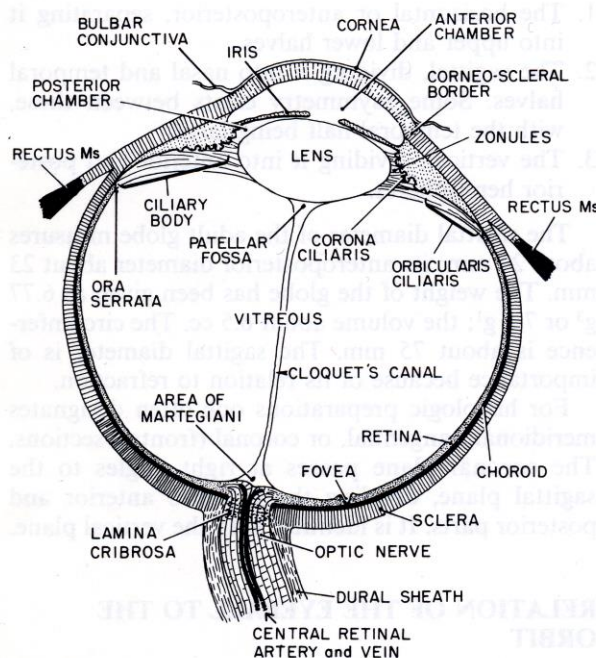


What You Should Know About Autoimmune Iritis, Choroiditis, and Uveitis

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A number of diseases arise from the body's immune system erroneously attacking the host's own tissues. Common diseases such as rheumatoid arthritis and eczema can be explained in this way. Uveitis is one such condition affecting the eye. When uveitis occurs, the cells responsible for carrying out immunologic functions attack the tissues of the uvea, one of the layers of the eye wall. During this attack, enzymes and chemicals are released which dilate blood vessels, causing leakage of protein and fluid and stimulating the formation of scar tissue. All of this activity inside the eye causes symptoms like tearing, soreness to touch or motion, sensitivity to bright light, and redness of the white part of the eye.

Figure 1. Anatomy of the Human Eye



Where Is The Uvea?

The eye has three layers, including the outer, tough layer called the cornea and sclera, a middle layer of blood vessels and connective tissue called the uvea, and an inner layer of nervous tissue called the retina,

which transforms light into nerve signals that travel to the brain via the optic nerve. The uvea is divided into a front part, called the iris, and a back part, called the choroid. All of these structures are illustrated in figure 1. When the immunologic attack is directed against the iris, the resulting disease is called iritis. When the choroid is the target tissue, the result is choroiditis. Uveitis is an umbrella term applied to both iritis and choroiditis.

What Causes Uveitis?

Although mysteries remain, our best thinking says that the major cause of uveitis is genetics. Each person has identifying molecules on the surface cells of the body. For instance, these marker cells are used to classify people into groups of compatibility for organ transplant and blood transfusion. Some marker molecules are more easily misinterpreted by the immunologic cells, which patrol the body like policemen. Mistaken as foreign, the cells of the uvea are attacked and damaged when they are, in fact, native to the person affected. Other events can sometimes trigger this attack. A previous episode of herpes virus infection of the cornea, or toxoplasma gondii parasitic infection of the retina, or a remote bowel infection by the bacterium shigella can sometimes trigger a secondary reaction.

How is Uveitis Treated?

The mainstay of treatment is corticosteroid. Topical varieties such as prednisolone and fluorometholone, oral forms such as prednisone, and injections such as triamcinolone, are all used for varieties of uveitis. Drops are frequently used to dilate the pupil and prevent the iris from scarring to the lens or cornea. Drops to prevent ocular pressure elevation, called glaucoma, are sometimes used as well. If an underlying infection is related to the uveitis, specific antibacterial, antiviral, or antiparasitic drugs are used. Extremely severe cases sometimes require the use of powerful drugs used to treat cancer or organ transplant rejection. In these cases, an internist or rheumatologist may be consulted to help with care and laboratory monitoring.

What is the Prognosis?

Uveitis can be a single incident or a recurring, episodic one. Mild cases and severe cases can leave vision unaffected or impaired,

respectively. Thus no blanket prognosis is possible. It is time, however, that all cases are more successfully managed with early diagnosis and institution of therapy. Often patients self-medicate and delay a visit to the ophthalmologist, an inevitably bad choice.

Final Comments

Uveitis is a term encompassing many specific diseases of diverse causes. Laboratory testing, including blood tests and radiologic tests, may be helpful to better classify the specific cause of the uveitis. Patients with uveitis can best manage their condition with in-depth education and tight coordination with the ophthalmologist in follow-up. After reading this brochure, if you have any questions, please contact Dr. Browning by email at contact@retinareference.com. If you would like to read more about uveitis, and excellent resource is the National Library of Medicine website, on the PubMed page. This site provides a wide variety of medical publications and can be accessed via any search engine or directly at the following link: www.pubmed.com.

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