

Chronic Anterior Uveitis

A Patient Education Monograph prepared for the American Uveitis Society
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NOTE: The opinions expressed in this monograph are those of the author(s) and not necessarily those of the membership of the American Uveitis Society, its leadership, or the Editorial Board of UveitisSociety.org. All medical decisions should be made in consultation with one's personal physician.

Introduction

Chronic anterior uveitis (CAU) is a term describing a long-standing [inflammatory](#) disease of the [anterior](#) part of the [eye](#). Disease duration that exceeds three months is generally considered “chronic”, as opposed to “acute” disease, which typically comes on quickly and lasts less than 6 weeks. CAU is not a specific disease itself, but a classification of disease that may be caused a number of other conditions.

Course of Disease

As stated above, chronic disease may last from months to years to a lifetime. Complications vary widely and include [cataract](#), [glaucoma](#), and [cystoid macular edema](#). The development of complications is generally directly related to the length and severity of active inflammation. Unfortunately, it is not possible to predict with any certainty the future course of CAU in the early months following establishment of the diagnosis.

Diagnosis and Testing

The hallmark of CAU is the presence of white blood cells within the anterior chamber of the eye. This is established with examination by an ophthalmologist with a [slit lamp](#). The degree of cells and flare indicate the severity of the inflammation and are usually given a score by the examiner, such as “trace”, “1+”, “2+”, up to “4+”. When there is an absence of inflammation, the eye is referred to as “quiet”.

Since CAU is not a specific disease itself, the ophthalmologist will attempt to determine if another disease is present to explain the uveitis. Laboratory studies of the blood and a chest X-ray are typically obtained, and depending on the specific details of each patient's history and appearance of the eye(s), additional specialized testing may be obtained. Some of the diseases that can cause uveitis include sarcoidosis, juvenile idiopathic arthritis, tuberculosis, syphilis, systemic lupus erythematosus, and viral infections. Monographs on many of these other

conditions are available on this website. A large percentage of patients will never have a definite cause established and these cases are referred to as [idiopathic](#).

Treatment

CAU should be controlled with an effort to reduce inflammation as much as possible in order to avoid sight-threatening complications. There is no one regimen that is best for everyone. Treatment is approached in an individualized, stepladder fashion, adapting it to the degree of inflammation. As in most other inflammatory ocular conditions, corticosteroids are the mainstay of therapy. Corticosteroids may be given as a drop, ointment, or shot next to the eye. Occasionally, pills or intravenous infusions are needed. Many patients will do fairly well with corticosteroid drops. However, since by definition CAU is a chronic disease, long-term use of medication is typically needed. The long-term use of corticosteroids by any route can result in undesired side effects and/or complications. Thus, the use of [immunosuppressive](#) medications has become an accepted strategy for long-term control. Adding an immunosuppressive agent may allow the reduction of the dosage of corticosteroids without loss of control of the disease. Repeated visits to a doctor and good communication between patient and [ophthalmologist](#) are essential to reduce the risks of CAU while tailoring the correct therapeutic regimen.

Surgery may be needed to address complications such as cataract and glaucoma. There is no surgery known to be effective at reducing inflammation by itself. Ensuring that the eye is free from inflammation for at least three months before any surgical procedure is a frequent rule-of-thumb used in an attempt to increase the chances of a successful outcome.

Further details regarding various surgical procedures that may be required in uveitic eyes are provided in additional monographs on this web site.

Cause of Condition

[Autoimmune](#) conditions are considered the most common causes of CAU, whether a specific disease is identified or not. Infectious diseases, such as tuberculosis and syphilis, among others, can result in CAU, but these conditions are infrequent causes in industrialized countries.

Prognosis

Controlled inflammation usually results in only limited damage to ocular structures. When complications occur, additional medical and surgical interventions may be needed, and the risk of vision loss increases. Patients who respond well to therapy and adhere to their medical care have the best chance for preservation of vision.

Research and Future Outlook

The use of new anti-inflammatory agents is now being studied. The future may hold new biologic immune modifiers that will effectively block autoimmune activities avoiding unpleasant side effects. Better understanding of the specific autoantigens (those proteins that incite the inflammatory response) in ocular tissue and the nature of the immunologic response to them will result in better therapeutic strategies and even the prevention of this chronic condition.