Uveitis

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KEYWORDS

• Uveitis • Multidisciplinary management • Ocular inflammatory disease • Scleritis • Corticosteroids • Immunosuppressive therapy • Biologics

KEY POINTS

- Multidisciplinary management in the diagnosis and management of patients with ocular inflammatory disease is often critical.
- The workup of uveitis or scleritis may reveal an underlying systemic disease; recognition of inflammation by the primary care physician can facilitate prompt referral to a uveitis specialist and improve patient outcomes.
- The primary care physician can assist the ophthalmologist in monitoring for potential side effects of corticosteroids and immunosuppressive drugs, including the newer biologic agents.
- The ophthalmologist in turn can assist the primary care physician in recognizing that active uveitis may suggest incomplete control of preexisting conditions, such as sarcoidosis, ankylosing spondylitis, juvenile rheumatoid arthritis, or vasculitis.

OVERVIEW OF UVEITIS

The uveal tract comprises the iris and ciliary body anteriorly and the choroid posteriorly. Although a strict definition of uveitis, therefore, is limited to inflammation of these tissues, in common usage uveitis also includes inflammation of adjacent tissues, including the cornea, sclera, retina, and even the optic nerve. Multiple structures may be involved (eg, sclerokeratitis, retinochoroiditis).

The Standardization of Uveitis Nomenclature (SUN) Working Group[1] defined types of uveitis by anatomic location and is the most commonly recognized descriptive format used in the uveitis literature. **Table 1** lists the types of uveitis anatomically by the primary site of inflammation location (eg, anterior, intermediate, posterior, and panuveitis). The SUN system also emphasizes the importance of onset (sudden vs insidious), duration (limited vs persistent), and course (acute, recurrent, or chronic) of uveitis (**Table 2**) and provides a grading scale for anterior uveitis. Grading scales for intermediate uveitis based on the amount of vitreous inflammation have also been described. Because these scales require the use of the slit-lamp and indirect ophthalmoscopes, only an ophthalmologist can categorize the uveitis by severity.

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Table 1
The SUN anatomic classification of uveitis

Type of Uveitis	Primary Site of Inflammation	Common Manifestations
Anterior	Anterior chamber	Iritis Iridocyclitis
Intermediate	Vitreous	Vitreitis
Posterior	Retina Choroid Optic nerve	Retinitis Choroiditis Retinochoroiditis Chorioretinitis Neuroretinitis
Panuveitis	Anterior chamber, vitreous, retina, choroid, and/or optic nerve	All of the above

Adapted from Jabs DA, Nussenblatt RB, Rosenbaum JT, Standardization of Uveitis Nomenclature Working Group. Standardization of uveitis nomenclature for reporting clinical data: results of the first international workshop. Am J Ophthalmol 2005;140:510; with permission.

Scleritis is categorized as either anterior (eg, diffuse, nodular, or necrotizing) or posterior. Episcleritis is a milder and more superficial form of inflammation.

Other descriptive categorizations are also useful in some cases:

- Infectious versus noninfectious
- Granulomatous versus nongranulomatous
- Unilateral versus bilateral
- Solitary retinal/choroidal lesions versus multifocal
- Purely ocular versus systemic disease association
- Traumatic: blunt force, postoperative, or penetrating
- Uveitis versus pseudouveitis (masquerade syndromes, such as lymphoma)

Symptoms of uveitis vary based on the anatomic location, type of uveitis, duration of disease activity, extent of therapy, and presence or absence of prior sequelae. Common symptoms include blurred or distorted vision, pain, photophobia (light sensitivity), floaters, photopsia (flashing lights), blind spots, and haloes.

Cataract, macular edema, epiretinal membrane (wrinkling of the macula), and glaucoma are the most common complications of uveitis causing visual loss. Other signs

Table 2
The SUN working group descriptors of uveitis

Category	Descriptor	Definition
Onset	Sudden	Rapid onset of symptoms
	Insidious	Gradual onset of symptoms
Duration	Limited	$\leq$3-mo Duration
	Persistent	>3-mo Duration
Course	Acute	Single episode with sudden onset and limited duration
	Recurrent	Repeated episodes separated by inactive periods without treatment $\geq$3 mo in duration
	Chronic	Persistent uveitis with relapse within 3 mo after discontinuing treatment

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