

# Sjögren's Foundation Clinical Practice Guidelines

## Ocular Management in Sjögren's Patients

The Sjögren's Foundation has developed the first-ever U.S. Clinical Practice Guidelines for Ocular Management in Sjögren's to ensure quality and consistency of care for the assessment and management of patients.

The Clinical Practice Guidelines for Ocular Management in Sjögren's established that, in a given patient, the clinician must determine whether the dry eye is due to inadequate production of tears, excess evaporation, or a combination of both mechanisms. The success of a treatment option depends upon proper recognition and approach to therapy. For the development of the Sjögren's Foundation Ocular Guidelines, the Report of the International Workshop on Dry Eye (DEWS) was used as a starting point, then panels of eye care providers and consultants evaluated peer-reviewed publications and developed recommendations for evaluation and management of dry eye disease associated with Sjögren's.

### Ocular Guidelines Summary and Recommendation:

Evaluation of symptoms can be accomplished by use of a number of questionnaires to grade severity of symptoms. Practical considerations recommend use of three specific questions (Table 1). A number of clinical tests of tear function can be performed in the office setting to quantify the volume and stability of tear function, including tear meniscus height and rapid tear film breakup time (TFBUT). Determination of tear secretion rate is

the most helpful way to differentiate aqueous-deficient dry eye from evaporative dry eye, and this is usually accomplished by the Schirmer test. More advanced diagnosis of dry eye can be achieved by measuring tear film osmolarity, which can also be used to monitor response to therapy. Evaluation of lid blink function and health of the eyelid margin, particularly the meibomian glands, is necessary to quantify evaporative dry eye. Evaluation of the severity of dry eye disease is possible with application of topical dyes, including fluorescein, rose bengal, and lissamine green, to quantify damage to the ocular surface.

Management of dry eye depends upon the nature of the dry eye and the severity of symptoms. The algorithm presented in Figure 1 details the options available. In early disease,

tear replacement with topically applied artificial tear or lubricant solutions may be sufficient, but progressive or more severe inflammation of the lacrimal gland and ocular surface occur both as an inciting event in many cases and as a secondary effect as the dry eye disease worsens, called keratoconjunctivitis sicca (KCS), requires the use of dietary supplements (omega 3 essential fatty acids), anti-inflammatory measures (e.g., topical corticosteroids or cyclosporine), or oral secretagogues.

Plugging of the lacrimal puncta can be done once the inflammatory component of dry eye is controlled. Control of lid margin (meibomian gland) disease may require topical antibiotic or systemic doxycycline therapy. The most severe cases of dry eye, particularly those unresponsive to more standard therapy, may require use of topical autologous serum or partial closure of the interpalpebral fissure to reduce surface exposure. Scleral contact lenses may be needed to control severe ocular surface damage.

Dry eye may signal the presence of Sjögren's, particularly when it is associated with inflammation, difficulty in management, or dry mouth. A patient with suspected Sjögren's should be referred to a dentist for oral disease prevention/management and to a rheumatologist for systemic treatment.

Table 1 – Screening Questions for Dry Eye

### Key screening questions for dry eye disease

*A patient reporting 'Yes' to any of the following warrants a full ocular examination*

How often do your eyes feel dryness, discomfort, or irritation? Would you say it is often or constantly? **(Y/N)**

When you have eye dryness, discomfort, or irritation, does this impact your activities (e.g. do you stop or reduce your time doing them)? **(Y/N)**

Do you think you have dry eye? **(Y/N)**



Figure 1: Treatment Algorithm Based Upon Severity Level and Response to Therapy

Diagnosis	Treatment   Severity Level 1 <sup>1</sup>	Severity Level 2	Severity Level 3	Severity Level 4	Evidence <sup>2</sup>	Recommendation <sup>3</sup>
Dry eye disease – Aqueous deficiency <b>without</b> meibomian gland disease	<ul style="list-style-type: none"> <li>• Education and environment/diet modification</li> <li>• Elimination of offending systemic medication</li> <li>• Artificial tears, gels, ointments</li> </ul>	<ul style="list-style-type: none"> <li>• Omega 3 essential fatty acid supplement</li> <li>• Anti-inflammatory therapy: cyclosporine</li> <li>• Anti-inflammatory therapy: pulse steroids</li> <li>• Punctal plugs</li> <li>• Secretagogues</li> <li>• Moisture chamber spectacles</li> </ul>	<ul style="list-style-type: none"> <li>• Topical autologous serum</li> <li>• Contact lenses</li> <li>• Permanent punctal occlusion</li> </ul>	<ul style="list-style-type: none"> <li>• Systemic anti-inflammatory medication</li> <li>• Eyelid surgery</li> </ul>	good good good	<b>STRONG</b> <b>STRONG</b> <b>STRONG</b>
					moderate good	<b>MODERATE STRONG</b> <b>MODERATE STRONG</b> <b>MODERATE STRONG</b> <b>MODERATE STRONG</b> <b>MODERATE STRONG</b>
Dry eye disease – Aqueous deficiency <b>with</b> meibomian gland disease	<ul style="list-style-type: none"> <li>• Education and environment/diet modification</li> <li>• Elimination of offending systemic medication</li> <li>• Artificial tears with lipid component</li> <li>• Eyelid therapy: warm compress, massage</li> </ul>	<ul style="list-style-type: none"> <li>• Omega 3 essential fatty acid supplement</li> <li>• Anti-inflammatory therapy: cyclosporine</li> <li>• Anti-inflammatory therapy: pulse steroids</li> <li>• Topical azithromycin</li> <li>• Liposomal spray</li> <li>• Possible oral doxycycline</li> <li>• Expression of meibomian glands</li> <li>• Punctal plugs</li> <li>• Secretagogues</li> <li>• Moisture chamber spectacles</li> </ul>			good good good good	<b>STRONG</b> <b>STRONG</b> <b>STRONG</b> <b>STRONG</b>
					moderate good good good good good good good	<b>MODERATE STRONG</b> <b>MODERATE STRONG</b> <b>MODERATE STRONG</b> <b>MODERATE STRONG</b> <b>MODERATE STRONG</b> <b>MODERATE STRONG</b> <b>MODERATE STRONG</b> <b>MODERATE STRONG</b>
					good good good insufficient insufficient	<b>MODERATE STRONG</b> <b>MODERATE STRONG</b> <b>MODERATE STRONG</b> <b>DISCRETIONARY</b> <b>DISCRETIONARY</b>
					moderate good	<b>DISCRETIONARY</b> <b>MODERATE STRONG</b>

1 Assumes use of the International Dry Eye Workshop severity scale

2 Evidence is graded as good, moderate and insufficient

3 Recommendations range from strong, moderate strong and discretionary

