

Medical Value Asset / Ocular Surface Disease

ASCRS Cornea Clinical Committee Guidelines

Starr CE, Gupta PK, Farid M, Beckman K, Chan CC, Yeu E, Gomes J, Ayers BD, Berdahl JP, Holland EJ, Kim T, Mah FS, the ASCRS Cornea Clinical Committee. An algorithm for the preoperative diagnosis and treatment of ocular surface disorders. J Cataract Refract Surg. 2019;45:669-684



WHY THIS MATTERS: Consensus-based clinical practice guidelines represent the intention of a profession to elevate and transform the standard of care for patients. These guidelines acknowledge the importance of screening for and addressing visually significant ocular surface disease due to its potential direct adverse effect on visual quality and acuity both pre- and post-operatively. Ocular surface health cannot be maintained or rehabilitated in the absence of healthy meibomian gland function, as meibomian glands are the foundation of a healthy tear film, stable vision, and ocular comfort.

REACTIVE PRACTICE

Evaluation for OSD is only triggered if the patient has advanced to having and complaining of OSD related symptoms



PROACTIVE PRACTICE

NEW GUIDELINES: OSD should be ruled out or addressed prior to cataract and refractive surgery in all patients, regardless of symptoms

NEW GUIDELINES AND THE JJV PORTFOLIO

1. Perform thorough evaluation of the eyelids to rule out MGD and blepharitis.
2. Treat clinically significant MGD and blepharitis PRIOR to all cataract and refractive surgery, regardless of the presence or absence of symptoms.
3. LipiFlow® Thermal Pulsation 'is the favored preoperative MGD procedural treatment of over 80% of ASCRS Cornea Clinical Committee members.'

PART 1:
OSD Screen

ESSENTIAL SCREENING TESTS

- **Symptoms:** ASCRS SPEED II PREOP Questionnaire
- **Signs:** Osmolarity + inflammatory marker (MMP-9)

If positive: Perform tests to determine subtype to target treatment (includes meibography)

If negative: Move onto the clinical exam

PART 2:
Clinical Examination

- **Look:** Blink quality, lids & lashes for blepharitis, corneal or ocular surface abnormalities
- **Lift:** Upper eyelid, examine superior surface
- **Pull:** Assess lid laxity 'floppy eyelids,' fornices
- **Push:** Meibomian gland expression (with MGE); meibography: optional to help stage severity
- **Vital Dye Staining:** corneal staining and tear film break up time

PART 3:
Treatment based on subtype/severity

- Refers to management recommendation from Global Medical Consensus (TFOS DEWS II); start from Step 2 (Recall that Step 1 is the OTC phase of treatment)
- Lid Margin Disease treatments: LipiFlow (MGD), BlephEx (Blepharitis), other external lid heating devices, omega-3 supplements
- Antiinflammatory treatments: Prescription treatments, e.g. topical steroids, cyclosporin A, lifitegrast, oral tetracyclines
- Ocular surface staining treatment: various OTC/Rx drops, amniotic membranes, punctal plugs

Treat and Proceed with Surgery or Delay

- **Treat and proceed with surgery:** early stage or asymptomatic OSD (non-visually significant); counsel of high likelihood of condition worsening as a result of surgery; recommend prophylactic treatment before and after surgery
- **Delay surgery until OSD is resolved:** for patients with visually significant OSD* + other characteristics (e.g. irregular astigmatism, MGD, corneal abnormalities, central corneal staining)

***Visually significant OSD:** *potential direct adverse effect on visual quality and acuity both pre and post-operatively; OSD will lead to imprecision of presurgical measurements causing 'refractive misses'*