ASCRS PREOPERATIVE OSD ALGORITHM

ASCRS
FOR SURGEONS. FOR YOU.

PREOPERATIVE VISIT
≥ 2 week CL holiday/
no drops within 2 hours prior

* START HERE

NONINVASIVE REFRACTIVE PREOP MEASUREMENTS
(e.g., keratometry, topography, optical biometry, aberrometry, etc.)

OSD SCREEN

SYMPTOMS?
❶ ASCRS SPEED II Preop Questionnaire

SIGNS?
❷ Osmolarity ❸ Inflammatory Marker (MMP-9) ❹ Lactoferrin

NEGATIVE SCREEN (All normal)
OSD UNLIKELY

POSITIVE SCREEN (Any abnormality)
OSD LIKELY

To help establish OSD subtype and visual significance
OPTIONAL NONINVASIVE OSD TESTS
(e.g., meibography, topography, NI-TBUT, OCT TMH, OSI, aberrometry, LLT)

CLINICAL EXAM (LLPP)

Look:
Blink, lids, lashes,
interpalpebral surface

Lift:
Upper lid, examine
superior surface

Pull:
Assess lid laxity
'floppy eyelids,' fornices

Push:
Meibomian gland
expression

Stain (dye instillation):
Corneal staining?
TBUT? +/–Schirmer's

Corneal Nerve
Sensitivity Testing

OSD RULED OUT
No symptoms/No signs/Normal exam/No corneal staining

OSD RULED IN
Any combination of abnormal signs and/or symptoms;
visual significance based on results of above

NEUROPATHIC PAIN VS. **EARLY SITUATIONAL OSD/DED**
⊕ Symptoms/No signs/Normal Exam/⊖ Stain

+/- Symptoms

NEUROTROPHIC
No Symptoms/⊕ Signs/⊕ Exam/⊕ Stain

< Signs   > Signs

NON-VISUALLY SIGNIFICANT OSD (NVS-OSD)
(e.g., normal cornea, normal topography/
regular astigmatism, no corneal stain, stable vision)

VISUALLY SIGNIFICANT OSD (VS-OSD)
(e.g., corneal abnormality, central PEE, irregularly irregular
astigmatism, abnormal osmolarity, fluctuating vision, etc.)

SURGERY PROCEEDS
Counsel patient OSD may worsen postoperatively;
start prophylactic treatment

SURGERY DELAYED
Refractive measurements unreliable;
identify all OSD subtypes

EXPOSURE/LID MALPOSITION
(e.g., lagophthalmos, floppy eyelid)

DRY EYE DISEASE
EDE (MGD) > ADDE

LUMPS & BUMPS
(e.g., EBMD)

CONJUNCTIVITIS
(e.g., allergic, infectious)

OPTIONAL INVASIVE REFRACTIVE TESTS
(e.g., immersion and/or contact A, B scans, etc.)
Finalized refractive surgical plan (e.g., IOL, LRI, LVC, etc.)

TREATMENT PLAN
Based on subtype and severity of each OSD;
combined medical and procedural interventions

NEXT VISIT IS SURGERY

* END HERE

**ONCE VS-OSD IS
CONVERTED TO NVS-OSD**

Next office visit in 2-4 weeks;
start at **beginning** of algorithm.

This activity has been approved for *AMA PRA Category 1 Credit™*.