ASCRS PREOPERATIVE OSD ALGORITHM

★ Start Here

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

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

OSD SCREEN

SYMPTOMS?
① ASCRS SPEED II PREOP Questionnaire

SIGNS?
② Osmolarity
③ Inflammatory Marker (MMP-9)

Legend:
- Start/End
- Diagnosis
- Optional Data Collection
- Essential Data Collection
- Decision/Informational

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

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

NEUROTROPHIC CORNEA
NO Symptoms / ➕ Signs / ➕ Exam / ➕ Stain

+/– Symptoms

< 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.)
Finalize refractive surgical plan
(e.g. IOL, LRI, LVC, etc.)

TREATMENT PLAN
Based on subtype and severity of each OSD. Combined medical and procedural interventions.

★ End Here

NEXT VISIT IS SURGERY

ONCE VS-OSD IS CONVERTED TO NVS-OSD

Next office visit in 2–4 weeks. Start at **beginning** of algorithm.

ASCRS
FOR SURGEONS. FOR YOU.