Corticosteroids and the Eye

A quick guide for rheumatology, dermatology, and pain medicine clinicians

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Corticosteroids can raise intraocular pressure (steroid-induced glaucoma) and cause cataracts, by any route, and the pressure rise is usually asymptomatic. By the time a patient notices vision loss, optic nerve damage may already be established. Periodic eye exams are the only reliable way to detect it.

Routes that can raise eye pressure

- Topical eye drops and ointments (highest direct effect)
- Periocular and intravitreal injections or implants
- Skin creams on the eyelids and face
- Oral and IV steroids (higher dose, longer use)
- Inhaled and nasal steroids (lower, but real, risk)
- Epidural, spinal, joint, and soft-tissue injections

Higher risk patients

- Known glaucoma, glaucoma suspect, or family history of glaucoma
- High myopia, diabetes, or rheumatoid arthritis
- Children and older adults
- Higher doses, stronger steroids, longer duration, and prior steroid response

Other ocular effects

- **Posterior subcapsular cataract** with long-term or high-dose use
- Central serous chorioretinopathy
- Steroid eye drops can worsen some infections and slow healing

What we suggest

- **Baseline eye exam** (with IOP, optic nerve, and lens evaluation) before or soon after starting prolonged steroid therapy, especially in higher-risk patients
- **Recheck IOP soon after starting** steroid eye drops, injections near the eye, or higher-dose therapy, since the rise can occur within days to weeks, or months later
- **At least yearly** while on long-term steroids, and more often with risk factors
- **Refer promptly** for eye pain, blurred vision, halos, or any sudden vision change
- **Do not stop systemic steroids abruptly.** If pressure rises, we will lower it and coordinate with you on reducing or changing the steroid

What we do

- Measure IOP and examine the optic nerve and lens
- OCT and visual field testing when indicated
- Treat steroid-induced ocular hypertension and glaucoma with drops, laser, or surgery, and steroid-related cataracts with surgery
- **Send you a report** after every exam

How to refer

Call **(210) 485-1488** to refer a patient. We welcome referrals from rheumatology, dermatology, pain medicine, and all prescribers of corticosteroids.

Reference: Jones R 3rd, Rhee DJ. Corticosteroid-induced ocular hypertension and glaucoma: a brief review and update of the literature. *Curr Opin Ophthalmol.* 2006;17(2):163-167. Dr. Jones co-authored this review while a fellow at Harvard Medical School. Risk factors and screening suggestions summarize published literature and should be individualized.