

# **The Thirty Five Golden Eye Rules**

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# Ophthalmology: The Golden Rules of Eye Care

## 1 Always test and record vision

- The patient should wear any distance spectacles during eye chart testing.
- A 1 mm pinhole will improve acuity in refractive errors.

## 2 Never pad a discharging eye

- Allow it to drain.

## 3 Any blurred vision requires prompt investigation

- Distinguish whether it is sudden or gradual, painful or painless.
- Distorted vision (metamorphopsia) may indicate treatable macular disease.

## 4 Refer squint (strabismus) when it is first detected because

- Children do not grow out of squints.
- Intraocular pathology must be excluded.
- Amblyopia requires early treatment.

## 5 Irritable eyes are often

- Dry Eyes: Use tear supplements.
- Blepharitis: Check lid hygiene, remove crusting.
- Chronic Allergy: Avoid steroids.

## 6 Beware the unilateral red eye

It is almost always due to

- Foreign body.
- Trauma.
- Corneal ulcer.
- Iritis.
- Acute glaucoma.

## 7 Refer patients with eyelid ulcers

- An eyelid ulcer may be a basal cell carcinoma.

## **8 Conjunctivitis is almost always bilateral**

- Bacterial conjunctivitis responds rapidly to treatment.
- Pre-auricular lymphadenopathy may indicate viral conjunctivitis.
- If conjunctivitis is recurrent it may be due to a blocked nasolacrimal duct.

## **9 A corneal abrasion should heal in 24 hours if the cause is removed**

- Use antibiotic ointment and a doubled pad.
- Review the patient daily until the lesion is healed.
- Patients with UV flash burns may need sedation.
- Exclude dendritic ulcer.

## **10 Never use steroids if herpes simplex is suspected**

With herpes simplex remember

- It may be relatively painless.
- There is often a history of recurrence and scarring.
- Use antivirals only.
- Refer the patient.

## **11 Retinal detachment requires referral**

- Warning signals of retinal detachment include floaters, flashes and field defects.

## **12 More mistakes in medicine are made by not looking than not knowing**

- Eye examination requires illumination and magnification.
- Local anaesthetic drops in single use containers assist in the examination of painful lesions. Never use anaesthetic drops for continued pain relief.
- Fluorescein staining highlights epithelial abrasions or ulcers.

## **13 Prevent corneal exposure**

- Protect the cornea during anaesthesia or loss of consciousness --remove any contact lenses and tape the eye lids closed.
- Lubricants or lid surgery are indicated in exophthalmos or facial palsy.

#### **14 Steroids are dangerous**

Complications of steroids include

- Corneal Perforation with herpes simplex.
- Glaucoma (open angle).
- Cataract formation.
- Infection (fungal).

#### **15 If there is a corneal abrasion, look for a foreign body**

- Evert and closely inspect the upper eyelid for a subtarsal foreign body, remove it with a moistened cotton bud.
- Look for ingrowing eyelashes.

#### **16 Leave some foreign bodies alone**

- Never attempt to remove foreign bodies that are deep central corneal, intra-ocular or intra-orbital. Refer patients with these foreign bodies.

#### **17 Consider an intra-ocular foreign body**

- Suspect one if there is a history of hammering or high- speed injury.
- The entry wound may seem trivial.
- If it is suspected, send the patient for an X-ray and refer.

#### **18 Sudden loss of vision is an emergency**

- In the elderly, suspect temporal arteritis. With optic nerve ischaemia, the patient will have an afferent pupil defect –start high-dose oral steroids and confirm the diagnosis by recording the elevated ESR.
- Other causes of sudden loss of vision include retinal artery or vein occlusion and macular haemorrhage.

#### **19 A penetrating eye injury is an emergency**

- Use a sterile pad with no eye drops or ointment.
- Make sure the patient has nil by mouth.
- If treatment is delayed, give systemic antibiotics/tetanus toxoid.
- Gentle transport is essential: use analgesia, anti- emetics and sedation.

## **20 With facial and lid injuries first exclude eye injury**

- Eyelid lacerations require, accurate apposition of the lid margin.
- Do not excise eyelid skin.

## **21 Using the ophthalmoscope**

- Pupil dilatation aids diagnosis.
- Use tropicamide 0. 5% to dilate the pupil.
- The only contraindication to dilation is head injury.
- The risk of precipitating acute glaucoma when dilating a pupil is low.

Remember: what passes unseen remains unsuspected.

## **22 Irrigate chemical burns**

- Immediately irrigate copiously with water for 15 minutes.
- Instill a local anaesthetic to evert and swab the eyelids.
- Refer the patient for emergency eye care.

## **23 Optic discs are easily seen**

- Consider
  - Papilloedema --if there are blurred margins and the patient has good vision.
  - Optic neuritis --if there are blurred margins, reduced vision and an afferent pupil defect.
  - Chronic open-angle glaucoma --if there is cupping.

## **24 Behind the black eye there may be a blunt eye injury**

- If there is diplopia, suspect a blow-out fracture of the orbital floor. An X-ray or CT scan is needed.
- Hyphaema may indicate a severe injury. To avoid a rebleed, prescribe rest and tell the patient to avoid aspirin.

## **25 Transient blindness can be serious**

Causes include

- Carotid artery disease –occasionally retinal emboli are visible.
- Migraine aura (often without headache).

## **26 Blindness in diabetes mellitus is largely preventable**

- Ophthalmoscopy through dilated pupil at time of diagnosis (except in pre-pubertal children).
- Repeat screening five years after diagnosis, then at least two-yearly.
- Refer the patient if retinopathy is present.

## **27 Hypertensive retinopathy is rarely clinically significant**

- Its presence may indicate longstanding or severe hypertension.
- Retinal changes are reversible with treatment.
- These patients are prone to retinal vein and artery occlusion.

## **28 Headaches are rarely due to a refractive cause**

- Ocular causes -- examine for acute glaucoma, iritis.
- Extra-ocular causes --examine for papilloedema, visual field defects, temporal artery tenderness.

## **29 Visual field defects are ocular (horizontal) or central (vertical)**

Consider

- Vertical –homonymous hemianopia, bitemporal field defects.
- Horizontal –branch artery occlusion, open-angle glaucoma, retinal detachment.

## **30 Pupil examination – differential diagnoses**

- Pupil is irregular –iritis, injury, surgery.
- Pupil is dilated –third nerve palsy (may be due to head injury), amphetamines, glaucoma drops (dipivefrine)
- Pupil is constricted –Horner’s syndrome, narcotics, glaucoma drops (pilocarpine).
- There is an afferent pupil defect –retinal artery occlusion or optic nerve lesion.

### **31 Cataract surgery is the most common eye operation**

- It is advised when symptoms are interfering with the patient's lifestyle.
- It is minimally invasive with local anaesthesia and day surgery.
- Cataract does not recur. YAG laser capsulotomy may be required at a later date.

### **32 Chronic open-angle-glaucoma requires screening**

- There are no early signs or symptoms.
- It is familial.
- Elevated intra-ocular pressure causes optic disc cupping and visual field loss.
- Treatment compliance is a problem.
- Recommend routine screening for all adults older than 40.
- Ocular examination for presbyopic glasses provides a good opportunity for opportunistic screening.

### **33 Acute angle closure glaucoma is rare**

- It is rare in people younger than 60.
- Symptoms include pain, haloes and blurred vision.
- Signs include a shallow anterior chamber, a red eye and a fixed mid-dilated oval pupil.
- Treatment: start pilocarpine drops then YAG laser treatment, which is usually curative.

### **34 Admit the following to hospital at once**

- Hyphaema
- Hypopyon.
- Penetrating eye injuries.
- Severe chemical burns.
- Acute glaucoma.

If you don't know, ask.

### **35 Beware of herpes zoster ophthalmicus if the nose is involved**

- If the external nasal branch is involved, the eye is likely to be involved.
- Early systemic treatment is required.
- Assessment by an ophthalmologist is essential.