RED EYE, RED EYE
What do YOU See???

The role of the front office and optometric assistant in the detection and treatment of RED EYES

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Front office staff and assistants are THE first ones to begin the RED EYE evaluation process when answering the phone...

FIRST the patient calls the office...

What are some of the most common things they say?

# 1 Comment:

“My eye/eyes are RED... I'm afraid I have PINK eye”

“I have a RED bump on my eye and it’s really sore to touch it”

“I woke up with my eye all RED and it looks like it’s bleeding”

“My eye/eyes are all RED and goopy in the morning with yellowish green pus.”

“My eyes are RED and feel all gritty like I have sand in my eyes”

“My eyes are so RED and itchy... I can hardly stop rubbing them”

“I slept in my contact lenses last night and now my eyes are all RED and irritated”
"My 2 yr old poked me in my eye last, now it's all RED and I can hardly keep it opened"

"I purposely poked myself in the eye last night just to impress my friends and now it's RED and in extreme pain"

"I was doing some work under my car a few days ago and now my eye is all RED and feels like something might be in it"

"I was cutting some drywall last week and it feels like something got in my eye and now it's all RED"

Next, front office staff and assistants must know the proper questions to ask…

- WHEN did the REDNESS begin?
- Are you in any PAIN?
- Do you have any BLURRED VISION?
- Do your eyes ITCH, BURN, WATER or FEEL IRRITATED?
- Do you have any MATTER in or SECRETION from the eye?
- Is the REDNESS in ONE or BOTH eyes?
- Light sensitivity?

What should you do next??

Must determine how quickly the patient needs to be seen…

- URGENT/ IMMEDIATELY!!!
- Non-urgent / Later that same day

URGENT / Immediately!!

REDNESS associated with…

- Sudden or severe pain and discomfort
- Bleeding in or around the eye
Ocular Trauma
- Sports injury
- Auto accident
- Blow to the eye
- Fingernail scratch
- Paper cut
- Curling iron burn
- Chemical burn

Foreign Body or object in the eye
- Extreme discomfort and sensitivity to light
- Sudden change in vision or loss of vision
- Copious amount of matter or discharge

Non-urgent / Later the same day
REDNESS associated with...
- No ocular trauma
- No foreign body injury
- Mild pain or discomfort that has been present for several days to a week

No bleeding in or around the eye
- Little to no light sensitivity
- Little to no change in vision
- Little to no matter or discharge

Once the patient comes to the office, then what?
- Case history...
  Required by medical insurance companies
- All current medical insurance information...
  Need payment for services

Specific Case history information is needed...
RED EYE or EYES must be the CHIEF COMPLAINT
- Which eye has the problem? O.D./O.S./O.U.
- Does it cause vision loss or blur?
Did it occur suddenly or gradually?
Is the problem mild, moderate or severe?
How long has it been occurring?
Are there any associated symptoms?
Does anything help?

What tests should be performed before the patient sees the doctor?
- Visual Acuities?
  Always!!!!
- Blood Pressure?
- Intraocular Pressure?
  Why or why not?
- Any others?

What are some of the most common causes of RED EYE in an Optometric Office...

Any ideas???

Signs, Symptoms, Treatment
- Signs – What we clinically observe
- Symptoms – What the patient is feeling and experiencing
- Treatment – What we do to manage the condition

RED EYELID / EYELIDS
Most Common Conditions
- Hordeolum – Internal and External
- Chalazion
- Blepharitis
- Meibomianitis
- Trichiasis
- Eyelid Trauma

Red EyeLID or EyeLIDS: Conditions and Treatment
- Hordeolum (Stye)
  Localized infection or inflammation of the eyelid margin that involve hair follicles of eyelashes (external) or oil glands underneath eyelid (internal)
**Red EyeLID or EyeLIDS**

**Signs:**
1. Redness
2. Swelling
3. Bump on the outside or inside of the lid
4. Ptosis

**Symptoms:**
1. Sore and tender to the touch
2. Mild, Moderate or Extreme Pain

**Treatment:**
1. Warm/Hot Moist heat
   Bruder Mask
   “Hot Potato”
2. Topical Antibiotics, usually an ointment
3. Oral antibiotics, if required

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**Chalazion**

Hard eyelid lump caused by a single blocked or series of blocked oil glands.

NOT infectious

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**Red EyeLID or EyeLIDS**

**Signs:**
1. Redness
2. Swelling
3. Hard lump/bump on inside or outside of the eyelid

**Symptoms:**
1. No pain or tenderness
2. Cosmesis

**Treatment:**
1. Bruder Mask/ “Hot Potato” compress
2. Monitor for change
3. Excise if does not resolve
Red EyeLID or EyeLIDs

**Blepharitis**
Infection and inflammation of the outer eyelid glands along the entire eyelid margin

**Signs:**
1. Redness of eyelids at eyelid margins
2. Crustiness along the base of the lids and lashes
3. Tendency to frequently rub eyes

**Symptoms:**
1. Itching of eyelids
2. Grittiness of lids
3. Burning and ocular irritation
4. Watering of the eyes

**Treatment:**
1. Hot soaks and lid massage
2. Commercially available eyelid scrubs (w and w/o antibiotic)
3. Topical antibiotics usually an ointment

Red EyeLID or EyeLIDs

**Meibomianitis**
Infection and inflammation of the inner oil eyelid glands along the entire lid margin

“Hello, Doctor? Harold tried the warm compress you recommended and...”
Red EyeLID or EyeLIDs

Signs:
1. Redness and inflammation of inner eyelid margins
2. Toothpaste-like excretion from inner eyelid glands

Symptoms:
1. Burning of the eyes
2. General irritation of the eyes
3. Watering of the eyes

Treatment:
1. Hot moist soaks and massage
2. Bruder Mask
3. MiBo
4. LipoFlow Thermal Pulsation (NEW)
5. Topical antibiotic
6. Oral antibiotic

Trichiasis
Eyelid lashes that turn inward resulting in scratching of the cornea and conjunctiva

Signs:
1. Misdirected eyelashes that grow toward eye
2. Redness of the eye

Symptoms:
1. Scratchy feeling
2. Foreign body sensation
3. Itchiness

Treatment:
1. Removal of lashes
2. Eye drops
3. Bandage Contact Lens if needed
Red EyeLID or EyeLIDs:  
EyeLid Trauma  
Trauma occurring from sudden impact to the eye and eyelid...car accident, sports injury, blow to the face, chemical burn, etc.

Red EyeLID or EyeLIDs:  
Seriously? WHY??
**RED Conjunctiva and Sclera**

- **Subconjunctival Hemorrhage**

  Breaking of the tiny blood vessels between the conjunctiva and the sclera

**RED Conjunctiva and Sclera**

**Signs:**
1. Bloody looking eye
2. Well defined area of redness and bleeding
3. Flat or slightly raised hemorrhage

**RED Conjunctiva and Sclera**

**Symptoms...Usually None!**
1. No Pain
2. No irritation
3. No discomfort

**RED Conjunctiva and Sclera**

**Pinguecula**

Localized inflammation of the conjunctiva in the interpalpebral space

**RED Conjunctiva and Sclera**

**Signs:**
1. Reddish yellow inflammation with blood vessels running through
2. Blood vessels and inflammation stops at the limbus

**RED Conjunctiva and Sclera**

**Treatment:**
1. Check BP
2. Reassurance
3. Cold compresses followed by hot compresses
4. Artificial tears
**RED Conjunctiva and Sclera**

**Symptoms:**
1. Usually just bothersome appearance
2. May cause minor irritation

**Treatment:**
1. Artificial Tears
2. Topical anti-inflammatory drops
3. Sunglasses

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**RED Conjunctiva and Sclera**

**Symptoms:**
1. Usualy just bothersome appearance
2. May cause minor irritation

**Treatment:**
1. Artificial Tears
2. Topical anti-inflammatory drops
3. Sunglasses

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**RED Conjunctiva and Sclera**

**Signs:**
1. Appearance of a raised whitish triangle shaped vascular tissue "growing over the eye"

**Symptoms:**
1. Cosmetic concern over appearance
2. Dry irritated eye

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**RED Conjunctiva and Sclera**

**Pterygium**

Pronounced inflammation and fibrovascular tissue in the interpalpebral space extending past the limbus and into the cornea

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**RED Conjunctiva and Sclera**

**Signs:**
1. Mild diffuse pinkness of the conjunctiva
2. Hazy conjunctiva
3. Rubbing of the eyes... "universal sign"
4. Watery or white stringy discharge
5. Red swollen eyelids

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**RED Conjunctiva and Sclera**

**Seasonal Allergic Conjunctivitis**

Inflammation of the conjunctiva coinciding with pollen blooms, ragweed, animal dander, dust mites...

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**RED Conjunctiva and Sclera**

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**RED Conjunctiva and Sclera**

**Symptoms:**
1. Itching of the eyes which gets worse with rubbing
2. Tearing of the eyes
3. Mucus in corners
4. Sneezing

**Treatment:**
1. Avoid offending allergen (pollen blooms, animal dander, dust mites)
2. OTC allergy eye drops
3. Prescription allergy drops
4. Cool compresses
5. Oral allergy meds (Zyrtec, Claritin, Benadryl)

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**Acute Allergic Conjunctivitis**

**Signs:**
1. Extreme redness of the conjunctiva
2. Profound conjunctival chemosis (glassy appearance)
3. Red, swollen and edematous eyelids

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**Bacterial Conjunctivitis**

**Highly contagious infection of the conjunctiva caused by a multitude of bacterial strains**

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**Symptoms:**
1. Sudden intense itching and tearing
2. Ocular burning
3. Photophobia

**Treatment:**
1. Identify and remove offending allergen asap
2. Cold compresses for eyelid swelling
3. OTC oral antihistamine such as Benadryl
4. Prescription allergy and/or anti-inflammatory drops
RED Conjunctiva and Sclera

**Signs:**
1. Reddish “Pink” eye that usually starts in one eye... often moves to the other (Highly contagious)
2. Yellowish discharge

**Symptoms:**
1. Eyelids feel “glued shut” in the morning
2. Buildup of yellowish green discharge through the day
3. Mild to moderate irritation
4. Patient is usually “sick”

**Treatment:**
1. Topical antibiotic eye drops or ointment
2. Oral prescription antibiotics
3. Hot compresses

RED Conjunctiva and Sclera

**Signs:**
- Redness around the limbus usually due to over wear of CLs or solution intolerance

**Symptoms:**
1. Mild to moderate pain especially when wearing CLs
2. Tearing
3. Photophobia

**Treatment:**
1. Discontinuing CL wear (Usually temporarily)
2. OTC or Rx. Eye drops
3. Refit to other type of CL
4. Change CL solution

Contact Lens Associated Red Eye (CLARE)
Carotid Cavernous Fistula
Sudden vascular engorgement and ocular redness secondary to poor circulation of blood in cavernous sinus.

Signs:
1. Diffuse injection
2. Engorged “corkscrew” vessels
3. Unilateral

4. Progressive pulsatile proptosis which may cause a humming sound in skull
5. Decrease in VA
6. Increase in IOP due to increased venous pressure
7. Intolerable pain
8. Young adults – Head trauma
9. Older adults – Progressive atherosclerosis
10. May lead to neurological deficits or a fatal brain hemorrhage

Treatment:
1. Order CT scan and MRI to look for an enlarged superior ophthalmic vein
2. Refer to Neurologist/ Vascular surgeon

Which of the RED Eye conditions of the Conjunctiva are True Emergencies?
- Subconjunctival Hemorrhage
- Pinguecula
- Pterygium
- Seasonal Allergy
- Acute Allergy
- Bacterial Conjunctivitis
- CLARE
- Carotid Cavernous Fistula

RED EYE associated with Corneal Conditions and Treatment
- Foreign Body
- Abrasion
- Recurrent Erosion
- Dry Eye
- Corneal Infiltrate
- Chemical or UV Damage
- Corneal Trauma

RED EYE associated with Corneal Problem
Corneal Foreign Body

Signs:
1. Foreign object in eye usually metal, wood drywall, etc.
2. Unable to open eye
3. Light sensitive
**RED EYE associated with Corneal Problem**

**Symptoms:**
1. Moderate to extreme pain
2. Feels like something is in the eye
3. Discomfort
4. Photophobia

**Treatment:**
1. Removal of foreign body
2. Topical antibiotics
3. Bandage CL using a continuous wear CL

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**RED EYE associated with Corneal Problem**

**Corneal Abrasion**

Loss of surface cells on the front surface of the cornea

**Signs:**
1. Unable to open eye
2. Extremely light sensitive
3. Appearance of scratch or section of cornea removed

**Symptoms:**
1. Moderate to extreme pain
2. Feels like something is in the eye

**Treatment:**
1. Topical antibiotic eye drops
2. Fitting of a bandage CL until resolves
3. Prophylactic nightly use of lubricating eye ointments
**Red Eye associated with Corneal Problem**

**Recurrent Corneal Erosion**

Sporadic and spontaneous removal of the front surface cells of the cornea after previous corneal abrasion.

**Red Eye associated with Corneal Problem**

**Signs:**
1. Redness upon awakening
2. Watering and tearing of the eye

**Symptoms:**
1. Pain and irritation upon awakening
2. Feels like something is in the eye
3. Light sensitive

**Treatment:**
Prophylactic use of lubricating eye gels or ointments at bedtime to minimize future erosions.

**Red Eye associated with Corneal Problem**

**Contact Lens Associated Keratitis**

Corneal inflammation resulting from various CL related issues that can eventually result in fungal keratitis
- Overwear
- Poor hygiene
- Solution (ReNu Moisture-Loc)

**Red Eye associated with Corneal Problem**

**Contact Lens Associated Keratitis**

**Signs:**
1. Mild to severe interpalpebral redness
2. Mild to severe corneal staining

**Prescription:**
- Mild
- Moderate
- Severe

**Dry Eye Syndrome**

**Chronic lack of lubrication and moisture of the eye due to many factors including low tear production, poor tear quality and other eyelid issues.**

**Red Eye associated with Corneal Problem**

**Dry Eye Syndrome**

**Symptoms:**
1. Burning & stinging
2. Grittiness & Scratchiness
3. Foreign Body sensation
4. Photophobia
5. Intermittent blurred vision
6. Watering and tearing
RED EYE associated with Corneal Problem

Treatment:

1. OTC lubricants
   • Refresh Optive/Advanced
   • Systane Ultra/Balance
   • Soothe XP
2. Rx. eye drops
   • Restasis
   • Xiidra
3. Rx. anti-inflammatory eye drops (Steroid)

RED EYE associated with Corneal Problem

1. Omega-3
   Salmon, Tuna, mackerel, herring, trout, sardines or halibut
2. Ocular Supplements
   1000-2000 mg/Day

RED EYE associated with Corneal Problem

Corneal Infiltrate
Small hazy grey areas of inflammation usually near the limbus

Signs:
1. Redness
2. Tearing

RED EYE associated with Corneal Problem

Chemical Solution/UV Damage
Damage of the cornea caused by chemical solution or UV exposure

Signs:
1. Redness
2. Chemosis of Conjunctiva
3. Corneal Staining

RED EYE associated with Corneal Problem

Chemical Solution / UV Damage

Symptoms:
1. Pain and discomfort
2. Tearing, burning and stinging
3. Foreign body sensation

Treatment:
1. Artificial tears
2. Antibiotic / steroid drops
3. Change of CL solution
4. Advise against tanning bed use
5. Sun protection when outside
RED EYE associated with Corneal Problem

- Corneal Trauma

Which of the RED EYE conditions of the Cornea are True Emergencies??

- Foreign Body
- Abrasion
- Recurrent Erosion
- Dry Eye
- Corneal Infiltrate
- Chemical or UV damage
- Cornea Trauma

RED EYE associated with Uveal Tract

- Anterior Uveitis
  Inflammation of the middle layer of the eye

  Signs/Symptoms:
  1. Red, sore, inflamed eye
  2. Blurred vision
  3. Light sensitivity
  4. Small pupil

RED EYE associated with Uveal Tract

Treatment:
1. Cycloplegia
2. Topical steroids

Once the doctor examines the Red Eye Patient...how do YOU come back in the picture?

- Exam room assistance
- Patient education
- Follow-up care

Can you identify THIS Red EYE?

- Wake up with it
- No pain
- No discomfort
- No blurred vision
Is that your Final Answer?

A. Allergic Conjunctivitis
B. Pinguecula
C. Subconjunctival Hemorrhage
D. Pterygium

Can you identify THIS Red EYE?

- Itchiness
- Scratchiness
- Burning
- Irritation
- Frequently rubs eyes

Is that your Final Answer?

A. Hordeolum
B. Blepharitis
C. Foreign Body
D. Meibomianitis

Can you identify THIS Red EYE?

- Toddlers finger scratched eye
- Pain
- Tearing
- Hard to open
- Blurred Vision

Is that your Final Answer?

A. Dry Eye
B. Recurrent Corneal Erosion
C. Corneal Abrasion
D. Corneal Foreign Body

Can you identify THIS Red EYE?

- Burning
- Itching
- Watering
- Grittiness
- Irritation
- Eye strain
- Eye Fatigue
Is that your Final Answer?

A. Digital Eye Strain
B. CLARE
C. Dry Eye
D. Seasonal Allergy

Can you identify THIS Red EYE?

- Red Bump on Lid
- Moderate Soreness
- Tender to the touch

Is that your Final Answer?

A. Chalazion
B. Entropion
C. Hordeolum
D. Trichiasis

Can you identify THIS Red EYE?

- Woke up with eyes "glued" shut
- Yellowish matter through the day
- Mild irritation
- Had a cold last week

Is that your Final Answer?

A. Acute Allergic Conjunctivitis
B. Seasonal Allergic Conjunctivitis
C. Dry Eye
D. Bacterial Conjunctivitis

Can you identify THIS Red EYE?

- Yellow raised bump on white part of the eye
- Worse after being outside in sun and wind
- Mild occasional irritation
Is that your Final Answer?

A. Subconjunctival Hemorrage
B. Pinguecula
C. Pterygium
D. Bacterial Conjunctivitis

Can you identify THIS Red EYE?

- Itching
- Always rubbing eyes
- Watering
- Sneezing
- Allergies

Is that your Final Answer?

A. CLARE
B. Acute Allergic Conjunctivitis
C. Seasonal Allergic Conjunctivitis
D. Subconjunctival Hemorrhage

RED EYE??
THANK YOU!

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