RED EYE EMERGENCIES: What is YOUR Role???

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

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 office…
What are some of the most common things they say?

“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”

“My eyes are RED and goopy in the morning with yellow greenish pus”

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

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

“I slept in my contact lenses last night and now my eyes are all RED and irritated”

“My eye/eyes are all RED and goopy in the morning with yellow greenish pus”

“My eyes are so RED and itchy… I can hardly stop rubbing them”
"My two year old poked me in my eye last, now it's all RED and I can hardly keep it opened"

"I 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 yesterday 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 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?

Any Other Questions we should ask??

- 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 the following…

- **Sudden or severe pain and discomfort**
- **Bleeding in or around the eye**

URGENT / Immediately!!

**REDNESS** associated with the following…

- **Ocular Trauma** such as a sports injury, auto accident, blow to the eye, fingernail scratch, paper cut, curling iron burn, chemical burn, etc.

URGENT / Immediately!!

**REDNESS** associated with the following…

- **Foreign Body** or object in the eye
- **Extreme discomfort and sensitivity to light**

URGENT / Immediately!!

**REDNESS** associated with the following…

- **Sudden change in vision or loss of vision**
- **Copious amount of matter or discharge**

Non-urgent / Later the same day

**REDNESS** associated with the following…

- **No** ocular trauma
- **No** foreign body injury

Non-urgent / Later the same day

**REDNESS** associated with the following…

- **Mild pain or discomfort** that has been present for several days to a week
- **No** bleeding in or around the eye
Non-urgent/Later the same day

- REDNESS associated with the following…
  - Little to no light sensitivity
  - Little to no change in vision
  - Little to no matter or discharge

Once the patient comes to the office, what do you do?

- Case history information…
  - Required by medical insurance companies
- All current medical insurance information so that payment for the office visit will be received

Specific Case history information is needed…

- RED EYE or EYES must be the CHIEF COMPLIANT
  - Which eye has the problem? O.D./O.S./O.U.
  - Does it cause vision loss or blur?

Specific Case history information is needed…

- Did it occur suddenly or gradually?
- How severe is the problem?
- Is it worse at a specific distance?
- How long does it last?

Specific Case history information is needed…

- 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? NO!!!! Why?
- Any others?
Now...let’s take a look at some of the most common causes of RED EYE in an Optometric Office...

Any ideas???

**RED EYELID / EYELIDS**

Most Common Conditions

- Hordeolum – Internal and External
- Chalazion
- Blepharitis
- Meibomianitis
- Trichiasis
- Eyelid Trauma

**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 or EyeLIDS**

- **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 eyelid

- Symptoms:
  1. Sore and tender to the touch
  2. Mild, Moderate or Extreme Pain
Red EyeLID or EyeLIDS: Most Common Findings and Treatment

**Treatment:**
1. “Hot Potato” Compress
2. Topical Antibiotics, usually an ointment
3. Oral antibiotics, if required

Chalazion

Hard eyelid lump caused by a single blocked or series of blocked oil glands... NOT infectious

Red EyeLID or EyeLIDS: Most Common Findings and Treatment

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

**Symptoms:**
No pain or tenderness

Chalazion

Hard eyelid lump caused by a single blocked or series of blocked oil glands... NOT infectious

Red EyeLID or EyeLIDS: Most Common Findings and Treatment

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

Blepharitis

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

Red EyeLID or EyeLIDS: Most Common Findings and Treatment

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

Red EyeLID or EyeLIDS: Most Common Findings and Treatment

**Signs:**
1. Redness of eyelids at eyelid margins
2. Crustiness along the base of the lids and lashes
3. Tendency to frequently rub eyes
Red EyeLID or EyeLIDs: Most Common Findings and Treatment

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

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

**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 soaks and lid massage
2. Commercially available eyelid scrubs
3. Topical antibiotics usually an ointment
4. Oral antibiotic

**Red EyeLID or EyeLIDs: Most Common Findings and Treatment**

**Treatment:**
1. Hot soaks and lid massage
2. Commercially available eyelid scrubs
3. Topical antibiotics usually an ointment
**Red EyeLID or EyeLIDs: Most Common Findings and Treatment**

**Trichiasis**
- Eyelid lashes that turn inward resulting in scratching of the front surface of the eye

**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: Most Common Findings and Treatment**

**Symptoms:**
1. Moderate to severe pain
2. Light sensitive
3. Blurred vision

**Treatment:**
1. Cold ice packs
2. Pain management
3. Oculoplastic surgeon

**EyeLid Trauma**
- Trauma occurring from sudden impact to the eye and eyelid...
- car accident, sports injury, blow to the face, chemical burn, etc.

**Signs:**
1. Moderate to severe eyelid redness
2. Possible cut of the eyelid (as seen here)
3. Total lid obliteration (as seen in next slide)
Which of the **RED Eyelid** conditions are True Emergencies?

- Hordeolum – Internal and External
- Chalazion
- Blepharitis
- Meibomianitis
- Trichiasis
- Eyelid Trauma

**RED Conjunctiva and Sclera**

**Most Common Conditions**

- Subconjunctival Hemorrhage
- Pinguecula
- Pterygium
- Seasonal Allergic Conjunctivitis
- Acute Allergic Conjunctivitis
- Bacterial Conjunctivitis
- Contact Lens Associated Red Eye (CLARE)

**RED Conjunctiva and Sclera**

**Most Common Conditions**

- Subconjunctival Hemorrhage

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

**RED Conjunctiva and Sclera**

**Most Common Conditions**

**Signs:**

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

**RED Conjunctiva and Sclera**

**Most Common Conditions**

**Symptoms:**

Usually None (Asymptomatic)

1. No Pain
2. No irritation
3. No discomfort

**RED Conjunctiva and Sclera**

**Most Common Conditions**

**Treatment:**

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

**Most Common Conditions**

- **Pinguecula**
  
  Localized inflammation of the conjunctiva in the interpalpebral space

**Signs:**

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

**Symptoms:**

1. Usually just bothersome appearance
2. May cause minor irritation

**Treatment:**

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

- **Pterygium**
  
  Pronounced inflammation and fibrovascular tissue in the interpalpebral space extending towards the cornea

**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

**Treatment:**

1. Monitor closely
2. Use of UV blocking sunglasses
3. Liberal use of Artificial tears
4. Surgical excision when encroaching on the pupil
**RED Conjunctiva and Sclera**

**Most Common Conditions**

- **Seasonal Allergic Conjunctivitis**
  
  Inflammation of the conjunctiva coinciding with pollen blooms, ragweed, animal dander, dust mites, etc.

- **Acute Allergic Conjunctivitis**
  
  Sudden, extreme inflammation caused by an abrupt exposure to a specific allergen

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**RED Conjunctiva and Sclera**

**Most Common Conditions**

**Signs:**

1. Mild diffuse pinkness of the conjunctiva
2. Hazy conjunctiva
3. Rubbing of the eyes known as “universal sign”
4. Watery or white stringy discharge
5. Red swollen eyelids

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**RED Conjunctiva and Sclera**

**Most Common Conditions**

**Symptoms:**

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

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**RED Conjunctiva and Sclera**

**Most Common Conditions**

**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

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**RED Conjunctiva and Sclera**

**Most Common Conditions**

**Signs:**

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

**Most Common Conditions**

**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

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**Bacterial Conjunctivitis**

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

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**RED Conjunctiva and Sclera**

**Most Common Conditions**

**Signs:**

1. Reddish "Pink" eye that usually starts in one eye, but often moves to the other (Highly contagious)
2. Yellowish-green discharge

**Treatment:**

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

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**Contact Lens Associated Red Eye (CLARE)**

**Signs:**

Redness around the limbus usually due to over wear of CLs or solution intolerance
RED Conjunctiva and Sclera
Most Common Conditions

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

Which of the RED Eye conditions of the Conjunctiva are True Emergencies?

- Subconjunctival Hemorrhage
- Pinguecula
- Pterygium
- Seasonal Allergy
- Acute Allergy
- Bacterial Conjunctivitis
- CLARE

RED EYE associated with Corneal Problems...Most Common Conditions

- 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
**RED EYE associated with Corneal Problem**

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

**RED EYE associated with Corneal Problem**

**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

**RED EYE associated with Corneal Problem**

**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**

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

**Corneal Abrasion**
Loss of surface cells on the front surface of the cornea

**Recurrent Corneal Erosion**
Recurrence of the removal of the front surface cells of the cornea after previous corneal abrasion (Basically ripping off of the previously damaged cells)
### 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

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### RED EYE associated with Contact lens-associated keratitis

### RED EYE associated with Dry Eye Syndrome

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

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

**Treatment:**
1. OTC artificial tears (Refresh Optive, Systane Ultra or Balance, Soothe XP)
2. Rx. anti-inflammatory eye drops (Restasis)
3. Rx. anti-inflammatory eye drops (Steroid)
**RED EYE associated with Corneal Problem**

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

**RED EYE associated with Corneal Problem**

**Signs:**
1. Redness
2. Tearing

**Symptoms:**
1. Foreign body sensation
2. Mild to severe irritation
3. Light sensitive

**Treatment:**
1. Topical antibiotic-steroid drops

**RED EYE associated with Corneal Problem**

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

**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**

**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**

**Chemical Infiltrate**

- Small hazy grey areas of inflammation usually near the limbus

**Chemical / UV Damage**

- Damage of the cornea caused by chemical solution or UV exposure

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

**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

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**?

- Woke up with it
- No pain
- No discomfort
- No blurred vision

Is that your Final Answer?

A. Chalazion
B. Allergic Conjunctivitis
C. Subconjunctival Hemorrhage
D. Blepharitis

Can you identify THIS **Red EYE**?

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

Is that your Final Answer?

A. Chalazion
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. Pinguecula
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. Dry Eye
B. CLARE
C. Foreign Body
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. Corneal Infiltrate
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. Pterygium
C. Dry Eye
D. Bacterial Conjunctivitis

Can you identify THIS Red EYE?

- Yellow raised bump on white part of the eye
- Seems to look worse after being outside in sun and wind
- Mild occasional irritation

Is that your Final Answer?
A. Subconjunctival Hemorrhage
B. Pinguecula
C. Pterygium
D. Bacterial Conjunctivitis

Can you identify THIS Red EYE?

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

Is that your Final Answer?
A. Foreign Body
B. CLARE
C. Acute Allergic Conjunctivitis
D. Seasonal Allergic Conjunctivitis
Questions on RED EYE??

Thank you…it has been a pleasure spending the past few hours with you!

I hope you feel that you have learned more about your RED EYE patients.

Have a fantastic conference …

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