RED EYE EMERGENCIES: What do YOU do???

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”

Other common things they say…

“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”
Other common things they say…

“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”

Other common things they say…

“My two year old was having a temper tantrum and her fingernail scratched my eye, now it’s all **RED** and I can hardly keep it opened”

Other common things they say…

“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”

Other common things they say…

“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 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?

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, 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

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

- Have them fill out appropriate case history information…medical insurance companies
- Obtain 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 : Most Common Findings 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: Most Common Findings and Treatment

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

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

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

**Treatment:**
1. “Hot Potato” compress
2. Monitor for change
3. Excise if does not resolve

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

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

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**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

**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

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

Red EyeLID or EyeLIDs: Most Common Findings and Treatment

**Signs:**
1. Redness and inflammation of inner eyelid margins
2. Toothpaste like excretion from inner eyelid glands
Red EyeLID or EyeLIDs: Most Common Findings and Treatment

**Symptoms:**

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

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**Treatment:**

1. Hot soaks and massage
2. LipoFlow Thermal Pulsation (NEW!)
3. Topical antibiotic
4. Oral antibiotic

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**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

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**Signs:**

1. Misdirected eyelashes that grow toward eye
2. Redness of the eye
Red EyeLID or EyeLIDs: Most Common Findings and Treatment

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

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: Most Common Findings and Treatment

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)

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
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

**Pinguecula**

Localized inflammation of the conjunctiva in the interpalpebral space

**Treatment:**
- 1. Check BP
- 2. Reassurance
- 3. Cold compress followed by hot compresses
- 4. Artificial tears

**Signs:**
- 1. Reddish yellow inflammation with blood vessels running through
- 2. Blood vessels and inflammation stops at the limbus
RED Con junctiva and Sclera
Most Common Conditions

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

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

RED Con junctiva and Sclera
Most Common Conditions

Pterygium
Pronounced inflammation and fibrovascular tissue in the interpalbebral space extending towards the cornea

RED Con junctiva and Sclera
Most Common Conditions

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
**Seasonal Allergic Conjunctivitis**

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

**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

**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
**Acute Allergic Conjunctivitis**

- Sudden, extreme inflammation caused by an abrupt exposure to a specific allergen

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

**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

**Bacterial Conjunctivitis**

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

**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

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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 EYЕ 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

**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

**RED EYE associated with Corneal Problem**

- **Corneal Abrasion**

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

**Treatment:**
1. Topical antibiotic eye drops
2. Fitting of a bandage CL until resolves
3. Prophylactic nightly use of lubricating eye ointments

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**RED EYE associated with Corneal Problem**

**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

RED EYE associated with Corneal Problem

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

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

RED EYE associated with Corneal Problem

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 artificial tears (Refresh Optive, Systane Ultra or Balance, Soothe XP)
2. Rx. anti-inflammatory eye drops (Restasis)
3. Rx. anti-inflammatory eye drops (Steroid)

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

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

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

- Chemical / 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
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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