



Certified *Patient*
SERVICE SPECIALIST

DISTANCE LEARNING COURSE

Triaging Ocular Emergencies

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Triaging Ocular Emergencies

OVERVIEW

Triage is the process of determining the priorities for action in an emergency and of establishing the order in which to carry out acts of medical assistance. This process is critical to appropriate care and treatment of patients who experience ocular emergencies and could mean the difference between adequate vision and potential blindness. Therefore, eye care practitioners and their staffs must have protocols to follow in triaging a variety of ocular complaints. The process of correct triage can often be a very difficult task to achieve — for both the technician and the patient, and there are a number of factors that make accurate triage difficult. These factors include:

- The patient's perception of the problem and its urgency.
- The patient's high fear level of the presumed problem and its potential treatment.
- Financial concerns regarding the visit or the treatment.
- The patient's interpretation of the possible cause of the problem.

It is important in an emergency situation that the physician's staff understands how to meet the needs of these patients on the phone, in the reception area, and in the exam lane.

This course will focus on the different types of ocular emergencies and associated symptoms, the appropriate questions to ask patients to determine the urgency of the problem for triage purposes, and the information that should be given to patients prior to their office visit. This course is not intended to be a course on the diagnosis or treatment of ocular emergencies; however, when appropriate, it will include some diagnostic and treatment methodology common to many eye care practitioners.

LEVELS OF URGENCY

When a patient presents to the office with an ocular emergency, first establish the level of urgency. Each state has well-defined levels of urgency. In addition, there are also "community standards" of acceptable practice with regard to specific emergencies. Individual eye physicians also may have a definition of what *they* perceive the levels of urgency are for specific emergencies.

It is important to have the eye physician develop triage guidelines that provide the appropriate time frame for a specific medical emergency. If there is any question as to where a patient "fits" into the guidelines specific to their symptoms, the physician should be contacted for determination of when to schedule the patient. If a physician is unavailable for consultation, it is advisable to schedule the patient sooner rather than later.

Although the terms may vary regionally, the most common definitions of the level of urgency are below:

LEVELS OF URGENCY
Immediate: within one to two hours
Urgent: within 24 hours
Semi-urgent: within a week
Routine: within three to six months

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DOCUMENTATION OF A TRIAGE CALL

When a patient calls or presents to the clinic with a complaint, it is important to record the complaint as well as any recommendations for the patient. Often patients will call the clinic to report an injury and have very specific ideas as to when a physician should see them. For example, a call on Wednesday may state, "I was playing basketball Monday night and was hit in my right eye by another player's elbow. My vision is blurry, I have a black eye, and my teeth are numb on the right side of my face. I also am seeing flickering lights in the right eye. I can't come in today, but I can come in on my day off — Friday."

If the appropriate triage protocol states that the patient should be seen on the day of the call, and the patient refuses that appointment for whatever reason, the following documentation should be made:

- The patient's name
- The patient's date of birth
- The time and date that of the call
- A brief synopsis of the patient's complaint, and any recommendations
- The action that the patient has taken. Examples of such documentation: "Appointment made 11 a.m. (include the date of appointment)" "Patient offered appointment today, states cannot come until Friday (include actual date). Advised that patient should be seen today, but appointment was made for Friday 10 a.m. Advised patient to call or be seen at local ER if symptoms increase. Patient agrees. Doctor alerted."

SPECIFIC CONDITIONS

The following sections discuss specific conditions that require efficient and accurate triage in order to best meet the needs of the patient.

OCULAR CONDITIONS REQUIRING TRIAGE	
Blunt trauma	Itching
Chemical splashes and burns	Lid swelling
Corneal abrasions	Lid twitch (myokymia) or blepharospasm
Decreased or distorted Vision	Light sensitivity/photophobia
Diplopia (double vision)	Pain
Discharge/"pinkeye"	Itching
Flashes/flashing lights	Swelling of the lid/orbit
Floaters	Penetrating trauma
Foreign body sensation	Ptosis or droopy lid
Glare/halos around light	Red or "bleeding eye"
Headaches	Epiphora or tearing

Blunt Trauma

Blunt trauma can cause a number of eye-related injuries and may result from sports-related injuries, assault/fights, job-related injuries, automobile accidents, projectiles and explosions.

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When blunt trauma occurs to the eye and orbital area, chief concerns may include:

- Ecchymosis (bruising) of the eyelids
- Hyphema: intraocular bleeding into the anterior chamber
- Angle recession: damage to the internal structures of the eye that can result in a secondary glaucoma
- Retinal tears, a retinal detachment, or both
- Ruptured globe

Because blunt trauma often causes simultaneous injuries to multiple parts of the eye, all blunt trauma patients should be seen on a same-day (urgent) basis. In addition to a comprehensive eye exam, including extraocular muscle evaluation, pupil testing, intraocular pressure and dilation, the physician may determine that the patient should be scheduled for X- rays or an MRI of the area involved. When working up the trauma patient, it is important to keep the doctor's protocols in mind. Many physicians prefer to evaluate abnormal pupils or muscle function before tonometry and dilation.

Some of the symptoms related to blunt trauma may include eye pain (due to a corneal abrasion) or pain in the area around the orbit, blurry vision and/or diplopia, and numbness on the side of the face where the trauma occurred.

Triage questions:

1. What happened? What were you hit with?
2. If the patient was in a motor vehicle accident, the following questions should be asked: Were you the driver or a passenger? Were you wearing a seatbelt? Did the air bag inflate?
3. Do you have eye pain on movement?
4. Is the eye/orbit bleeding? (When asking this question, make sure to define "bleeding.") If you gently place a tissue to the area, is there blood on the tissue? (It is important that the patient NOT to exert any pressure on the area while they are doing this!) Often patients state that their eyes are "bleeding" and then present with a subconjunctival hemorrhage.)
5. Do you have any double vision? If so, what type of double vision are you experiencing? Is it horizontal or vertical?
6. Do you have any flashing lights and/or floaters?

The patient should also be instructed not to put pressure on the eye, not to patch the eye, and not to manipulate the eye in any way before the physician can see the patient. This also includes attempting to remove a contact lens. It will be safer to have a doctor remove it in the office.

Summary: Triage patients with blunt trauma

1. Schedule an appointment for the patient on the day of the call.
2. Instruct patients not to manipulate the eye until they can be seen.

Level of urgency: Urgent

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Hyphema with ecchymosis.

Chemical Splashes and Burns

All chemical splashes and burns involving the eye can be potentially vision-threatening, resulting in possible corneal damage and scarring. The sooner care is administered, the better the patient's prognosis for a favorable outcome. The goal is for the patient to initiate treatment (flushing) *before* office evaluation.

Chemical burns are usually caused by either alkalis (having a pH of 7.1 or greater) or acids (having a pH less than 7.0). Chemical burns also are caused by thermal or ultraviolet exposure.

Alkalines are usually more damaging because they can permeate the eye rapidly. Common alkalines are ammonia (fertilizer, refrigerants, and household cleaners), lye (drain and oven cleaners), lime (plaster and concrete), and fireworks (sparklers and flares).

Acids usually cause less damage because the eye tissue acts as a barrier against the chemical. The most common acid to come in direct contact with the eye is from car batteries.

Chemical splashes frequently involve household cleaning solutions or chemicals used in the workplace. Children commonly come in contact with these chemicals while playing or exploring under the bathroom and kitchen sinks. Should a child experience a chemical splash, it is important to be prepared to deal not only with a child in pain but also with a concerned parent.

It is imperative to irrigate the eye with water immediately, and continually, for at least 10 to 15 minutes before coming to the office. It may be necessary to ask if there is a helper to assist in holding the eyelids open, ensuring complete and continuous flushing of the eye. Time is of the essence. Remember that outdoor hoses and showers are just as effective as indoor facilities for emergency irrigation.

Once the eye has been flushed, the patient should be seen for immediate care. Ask the patient to bring in the compound or chemical label so that the doctor can know the exact chemical as well as its concentration. This information may help the physician determine the appropriate treatment. If the chemical splash was a workplace injury, it will be helpful to have the material safety data sheet (MSDS) if available.

When the patient arrives at the clinic, the eye should be irrigated again (after checking with the physician) and its pH level checked until the reading is 7.0 (neutral). The doctor will order a vision test, perform a slit-lamp examination and order any other testing necessary to evaluate the eye. The patient might require irrigation with a Morgan lens if he or she is unable to participate in irrigation because of pain.

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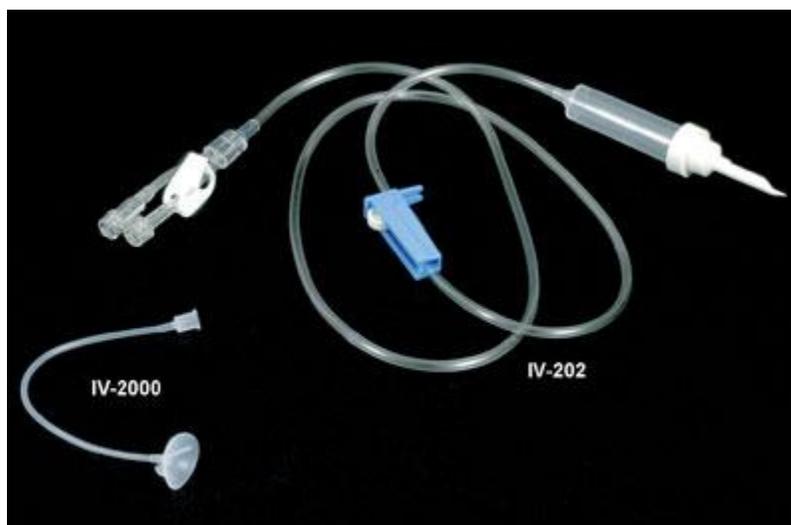
Summary: Triaging patients with chemical splashes and burns

1. Regardless of the chemical, patients with chemical burns or splashes need to be seen immediately.
2. Instruct the patient or helper to irrigate the patient immediately for 10-15 minutes before proceeding to the office, or refer them to the emergency room nearest to their current location.
3. Ask the patient to bring the chemical agent or provide a label identifying the contents of the source of the splash, if possible.
4. Have pH paper, which you must store out of direct sunlight, available for chemical injuries.

Level of urgency: Immediate



Flushing out the eye with water.



Morgan irrigating lens. Source: <https://shop.life-assist.com>

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Corneal Abrasion

Frequently, a physician will see someone who has scratched an eye. While minor abrasions may heal on their own within two to four hours, many patients experience significant pain, depending on the severity and location of the abrasion, and will request immediate care.

Most commonly, the patient will complain of a foreign-body sensation, photophobia, increased tearing, and decreased vision. Although visits for corneal abrasions are often thought of as “routine,” care is necessary when triaging these calls. The discomfort a patient feels with an abrasion versus a corneal ulcer is hard to differentiate. Another aspect to consider is whether patients are having a foreign-body sensation because they feel the scratched area every time they blink, or whether they have a retained foreign body in the eye? If they do, it is important to find out if it is on the eye, in the eye, or worst of all, has gone through the eye.

Triage questions:

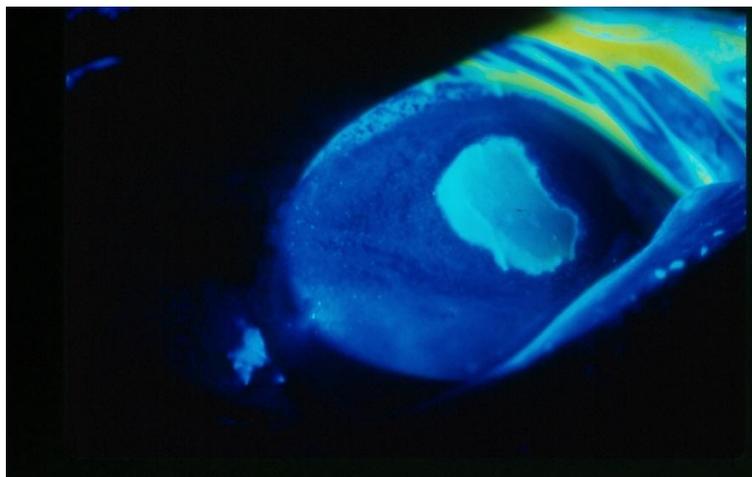
1. Do you wear contact lenses? Are you still wearing them?
2. What were you doing when you noticed your eye felt irritated?
3. If the problem occurred at work, was anything done to help the problem?
4. Did you wake up with eye pain, foreign-body sensation and redness? If so, it is possible that they may have scratched themselves in their sleep, have an infection, a contact lens episode from over-wearing, or have a recurrent erosion syndrome. (Note: A physician must diagnose these situations.)

The primary concern is to prevent infection and to ease pain while making certain that the abrasion heals appropriately. These patients should be seen within 24 hours of their injury. They should not attempt to remove contact lenses nor try to treat the injury with any eye drops. Again, the severity of the symptoms should determine the urgency of the appointment. The patient evaluation will include a slit-lamp evaluation using fluorescein dye to determine if an epithelial defect is present, and if so, to what extent. The physician will also be checking to make certain that there is no foreign body visible in the cornea.

Summary: Triage patients with possible corneal abrasions

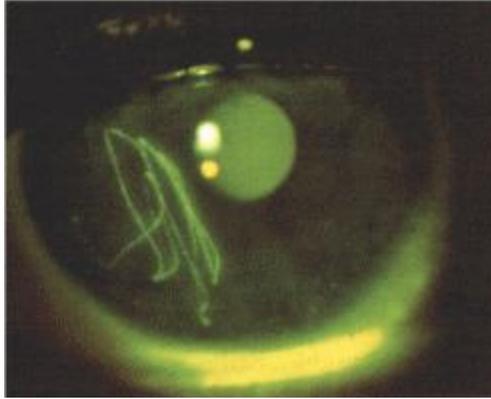
1. See the patient for an appointment within 24 hours.
2. Instruct the patient not to remove contact lenses or treat the eye with any drops.

Level of urgency: Immediate to urgent



Corneal Abrasion.

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Corneal abrasion due to foreign body under the eyelid. Source: perret-optic.ch

Decreased or Distorted Vision

Decreased vision is perhaps the most common complaint in any eye care practice, and it can be the most difficult triage category. What is important for this course is to be able to determine whether a complaint of this nature is an emergency. As a general rule, any case of acute loss or distortion in vision should be seen on the same day.

Some examples of causes of sudden visual loss are:

- Retinal detachment
- Optic neuropathy
- Central retinal artery occlusion
- Central retinal vein occlusion
- Migraine headaches.

If the loss has been gradual over a number of weeks or months, the vision loss could be the result of advancing cataracts or a change in the refractive state. In this case, schedule the patient for the next available appointment, according to practice protocols.

When taking these phone calls from patients complaining of decreased or distorted vision, demonstrate patience while asking triage questions, as it is important to ascertain the urgency of the condition.

Triage questions:

1. Do you wear glasses? Do you notice if the vision is still decreased with your glasses on? (Note: A number of patients have “vision loss” because they have lost their most recent contact lenses or glasses, are wearing their reading glasses instead of their distance prescription, and in rare cases, have had the lens pop out of their glasses without realizing it.)
2. Are you having decreased vision in one eye or in both eyes?
3. When you noticed the loss of vision, did the loss occur suddenly or did it occur gradually?
4. Did your vision go away and then return after a period of time?
5. Did your vision go away in “curtain form”? Is there a portion of the vision gone?

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Your physicians may also want to take a brief general patient medical history at this time, with specific focus on the following questions:

1. Do you have diabetes, high blood pressure, or heart problems?
2. Do you have any headache associated with the vision loss?
3. Have you had past eye surgery (i.e. intraocular lenses or past retinal procedures)?
4. Have you ever experienced this type of vision loss before?

The evaluation of a patient with sudden vision loss may include a vision test, refractometry to ensure that new lenses cannot improve the vision, a pupillary assessment to determine whether there is a neurologic complication and a dilated fundus exam so that the physician can evaluate the retina.

Summary: Triaging patients with decreased or distorted vision

1. Any acute (sudden) vision loss should be seen immediately per practice protocols.
2. Consult your doctor in questionable cases or if the patient cannot come into the office in the time frame recommended.

Level of urgency: Sudden vision loss: immediate; Gradual vision loss: semi-urgent to routine, determined by practice protocol

Diplopia (Double Vision)

As with many other ocular conditions, time of onset is the key to determining when to see a patient complaining of double vision. Diplopia might not constitute a true emergency, but, in most cases, anyone with new-onset diplopia should be seen on the same day. Diplopia cases that happen over a significant time period before the patient's contacting the office can be scheduled at the convenience of the patient or office. It is often helpful to determine whether a patient's diplopia is monocular (seeing double out of only one eye) or binocular (seeing double when both eyes are open).

Monocular diplopia is typically due to refractive error (especially astigmatic changes), corneal opacities, lens opacities (cataract), or macular problems (macular degeneration). With the exception of macular problems, none of these complaints represents an urgent condition. If, however, a patient has a known history of macular degeneration, he or she should be seen within a day or two because macular degeneration patients can develop new choroidal blood vessels and membranes, which can grow larger in a 48-hour period. Patients can experience metamorphopsia (wavy lines) and other visual disturbances. Since treatment is more effective the earlier these conditions are identified, prompt examination is warranted.

Binocular diplopia is a more pressing concern, particularly when it is of recent onset; however, long-standing diplopia does not require immediate attention. If binocular diplopia is of recent onset, prompt attention is necessary. Possible causes of recent-onset diplopia include myasthenia gravis, multiple sclerosis, cranial nerve III, IV, or VI palsies, thyroid eye disease, and other central nervous system problems, such as orbital or brain tumors.

The evaluation of a patient with complaints of diplopia will include a thorough extraocular exam, as well as visual acuity testing, refractometry (to ensure the measurement of refractive error has not changed), and a pupil examination should be performed. It is important to defer dilation of the patient until checking see if the doctor wishes to perform a more thorough extraocular muscle evaluation before dilation. A thorough medical history of the patient should be carefully documented.

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Triage questions:

1. Do you have any pain on eye movement?
2. Did it begin gradually or suddenly?
3. If you look in the mirror, do you notice if one eyelid is lower than the other?
4. If there is someone with the patient, ask that person to look and see if the patient's eyes are aligned evenly.
5. Do you see double with only one eye, or when using both?

Summary: Triaging patients with diplopia

1. If the diplopia is of recent onset and binocular, schedule the patient as soon as possible.
2. If the diplopia is monocular and there is a history of macular degeneration, schedule the patient within 48 hours.
3. If the patient is diabetic, ask if there is any pain with eye movement and if one eyelid is lower than the other.
4. Ask the physician if there is any question regarding the patient's condition, or notify the physician if the patient is delaying coming to the office. Remember to document the patient's responses.

Level of urgency: Binocular or sudden onset: immediate; Monocular or gradual onset: semi-urgent

Eye Discharge or "Pink Eye"

When patients complain of discharge from their eyes, there could be any number of problems contributing to the symptoms, ranging from seasonal conjunctivitis to bacterial conjunctivitis. Most patients with such symptoms call the office and state that they have "pinkeye."

"Pink Eye" is a common term for an episode of eye redness, discharge, and itching of the eyes. It is important to ask questions related to specific complaints in order to determine the urgency with which they should be seen.

Triage questions:

1. Is the discharge mucous or watery (like tears)?
2. What is the color of the discharge?
3. Is there pain or change in vision?
4. Have you changed anything in your life in the days leading up to the discharge (for example, a new pet, new carpet, new car, newly painted house or recent swimming in a chlorinated swimming pool or a lake)?
5. Have you had any upper respiratory disease in the past few days?
6. Has anyone else in the house had this problem?
7. Do you wear contact lenses?

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CONDITIONS RELATED TO “PINK EYE” OR EYE DISCHARGE	
Bacterial infection	Yellowish/green mucous discharge
Nasal lacrimal duct obstruction or infection	Greenish discharge near the punctal area, frequently seen in children
Blepharitis	Strands of white mucous discharge often present with crusting in the morning and throughout the day; teary, binocular, watery discharge
Allergic conjunctivitis	White discharge with intense itching; teary, binocular, watery discharge
Viral conjunctivitis	Binocular, watery discharge
Adenovirus and EKC (epidemic keratoconjunctivitis)	Often occurs after an upper respiratory infection; can be very contagious, and patients should be seen with caution; staff should employ proper hand-washing and office disinfection techniques.

The conditions above relate to symptoms in which there is a discharge coming from the eye. A broad triage of patient symptoms and complaints is recommended to determine the urgency of the problem. In most cases, patients with discharge from their eyes should be seen on the same day as the call, and, if not, definitely on the following day to ensure that their discharge is not a sign of a contagious problem or of a simmering infection. Usually, the only true emergency occurs when any of these patients has an associated complaint of pain or vision loss, or if there is an extreme amount of mucous involved.

Summary: Triage patients with “pink eye” or eye discharge

1. It is necessary to see most patients with complaints of eye discharge within 24 hours, if not the same day.
2. If patients experience an associated complaint of pain or loss of vision, they should be seen on the same day.

Level of urgency: Urgent



Bacterial conjunctivitis.

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Viral conjunctivitis. Source: image.tfd.com.

Flashes or “Flashing Lights”

Patients complaining of “flashing lights” or “lightning streaks” should be seen on the same day for a dilated exam. The most common problem associated with these symptoms is a posterior vitreous detachment. The vitreous is a transparent, colorless fluid with a texture similar to gel, that fills the posterior cavity between the lens and the retina. The vitreous is in contact with the retina, and part of its job is to help keep the retina in place by pressing it against the choroid. As the vitreous ages, it tends to attach to the retina via strands of clumped vitreous and tugs on the retina, stimulating the retina photoreceptor cells. The patient sees these as “flashing lights.” If the patient’s problem is a posterior vitreous detachment, the condition does not require treatment; however, this condition always needs to be evaluated to rule out the presence of a retinal tear or detachment. Retinal tears and/or detachments need immediate evaluation and treatment in the form of either a laser treatment to the affected area or vitreoretinal surgery. Other less common causes for flashes are ocular migraines, central nervous system disorders and retinitis.

Triage questions:

1. Do you know if you see flashes in one eye or both eyes?
2. If you see them in one eye, has that eye had cataract surgery with an intraocular implant?
3. When do you see the flashing lights? Most patients who have a posterior vitreous detachment, will state that they see the flashing lights or “lightening” when they are in a dark setting. Patients with a retinal detachment see the flashing light both day and night.
4. Is there any “color” to the lights? Patients who complain of seeing colored lights or colored confetti may be having an unformed hallucination. Unformed visual hallucinations are believed to originate outside of the temporal lobe and can be a sign of a potential brain tumor. Posterior vitreous detachments, retinal detachments, and ocular migraines often present as white lights.
5. Have you had any head or eye trauma in the past few days?

Summary: Triage patients with flashes or flashing lights

1. Schedule all patients with complaints of flashing or colored lights on the day of the call. Until you see the patient, it is impossible to determine the severity of the problem.
2. The person triaging the phone call must assume that the condition is serious until proven otherwise.

Level of urgency: Urgent

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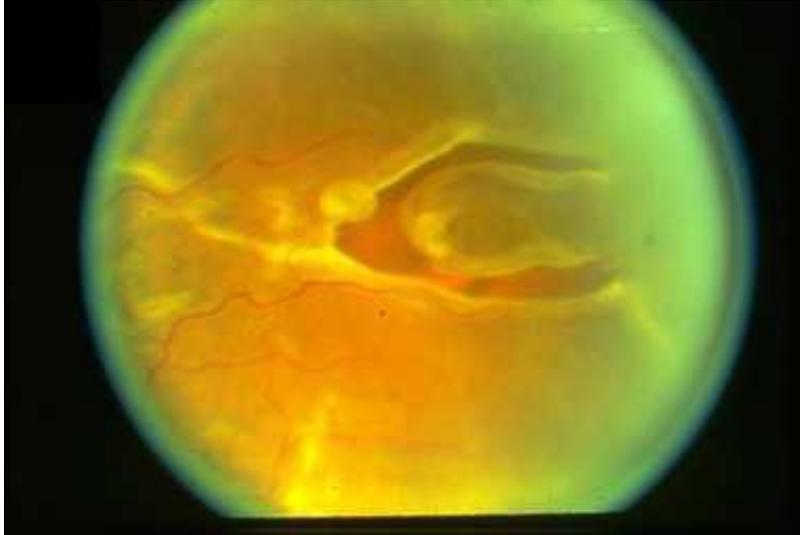


Photo: Retinal tear. Source: northdallaseye.com.

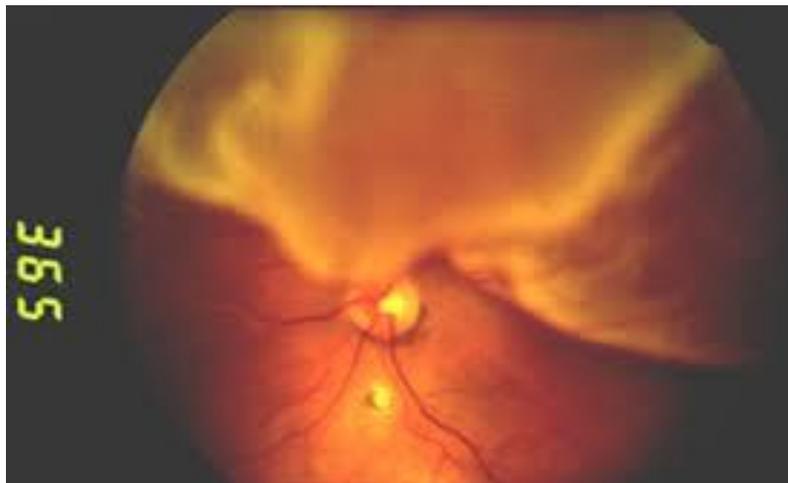


Photo: Retinal detachment. Source: eyeweb.org.

Floaters

This complaint is more common than flashing lights, but the two symptoms often go hand in hand. It is safest to adopt the same policy toward floaters and flashes: Never assume that if a patient complains only of floaters and does not describe flashes that it is not an urgent situation. Both symptoms can signify the same pathology.

In the past, the urgency of how soon to see a patient with complaints of “floaters” often depended upon how many floaters were present. This thought process is no longer valid when determining the urgency of the problem. Whether a patient has one floater or a shower of floaters, the patient should be seen the same day.

Triage questions:

1. How long have you noticed the floaters?
2. Have they increased in number?
3. Are they in one eye or both?
4. Do you notice them with your eyes open, closed or both?

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Summary: Triaging patients with complaints of floaters

1. Schedule all patients with complaints of floaters on the day of the call. Until the patient is seen, it is impossible to determine the severity of the problem.
2. The person triaging the phone call must assume that the condition is serious until proven otherwise.

Level of urgency: Urgent

Foreign Body Sensation

Any patient that presents with having “something in their eye” should be scheduled for evaluation the same day. Patients with potential foreign bodies or a foreign body sensation can run the gamut of having a non-urgent problem (for example, blepharitis) to having an intraocular foreign body. It is almost impossible to assess where the patient falls on the spectrum of urgency without evaluation.

If a patient can actually see the foreign body in the eye, it is important to inform patients that they should *not* attempt to remove the object themselves, nor should others attempt to do so. Such actions could result in more damage to the ocular structures.

Triage questions:

1. Do you know how the foreign body might have gotten into your eye?
2. What were you doing at the time the foreign body sensation occurred?
3. If you were at work, what are your responsibilities at work?

Be particularly aware of patients who say they were working on their car, or performing any activity where they were using any “metal-on-metal” action, such as hammering, using an electric saw, using a power staple gun or power nail gun, which can cause pieces of metal to move at incredible speeds. The foreign body may also have become very hot. When the foreign body hits the eye, it may actually penetrate the eye and “seal” the hole as it enters the globe. The patient may state that their eye is red, but they do not have any pain. All patients experiencing this type of injury should have a dilated eye exam immediately to ensure they do not have an intraocular foreign body.

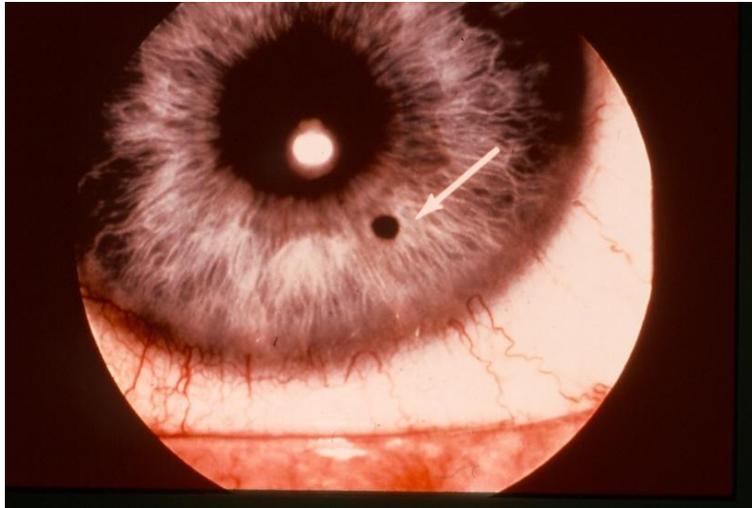
Flushing the eye with water or sterile eyewash is acceptable, but patients should not try to manipulate any visible foreign body with a cotton swab or tissue. It is best to have patients report to the clinic as soon as possible for evaluation by a physician. Eye care physicians have the proper equipment to diagnose and treat these conditions.

Summary: Triaging patients with possible foreign bodies

1. Instruct patients not to remove object(s) themselves.
2. Schedule the patient for an appointment the same day or refer the patient to an emergency room if a physician is not available to evaluate the patient.

Level of urgency: Immediate to urgent

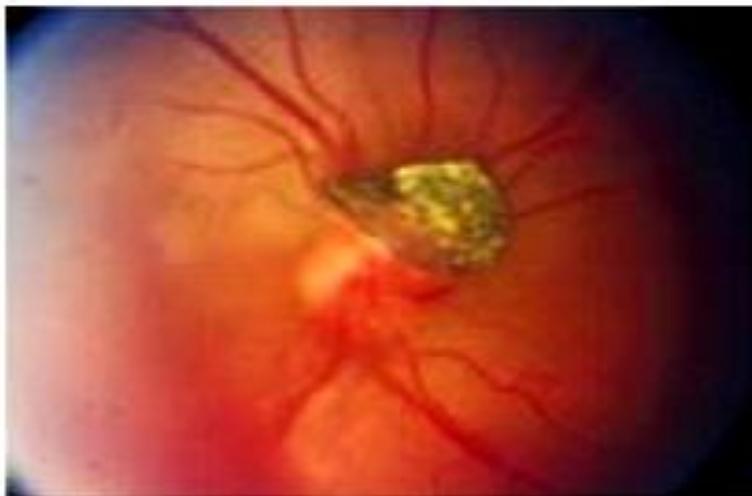
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Foreign body on cornea and/or under lid.



Foreign body on cornea and/or under lid.



Metallic foreign body. Source: savingvision.org.

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Glare and/or Halos Around Lights

Rarely are glare and halos a true emergency. Most often, the cause for these symptoms is cataracts. It is important, however, to distinguish glare and halos from photophobia or light sensitivity (*see below*). The primary difference between the two is discomfort. Glare and halos typically are not associated with pain, but photophobia can be very painful.

Triage questions:

1. When was the last time you had an eye exam?
2. Have you ever been told that you have cataracts or glaucoma (increased intraocular pressure)?
3. Do you wear contact lenses? Do you sleep in them? How often do you change your lenses? If patients are over-wearing contact lenses, they might have glare issues. In most cases of contact lens over-wear, some level of discomfort is likely.

Summary: Triaging patients with glare and/or halos

1. Schedule patients experiencing glare, halos or both on a semi-urgent basis (within one week).
2. Schedule the patient on same day if the patient is experiencing pain or discomfort.

Level of urgency: Semi-urgent to urgent

Headaches

Headaches are one of the most common complaints eye doctors encounter. Although the eyes take the blame, problems with the eyes rarely cause headaches; however, as with all triage concerns, there are exceptions.

Eye strain from an incorrect prescription, uncompensated phorias or tropias, and improper fitting of spectacles might cause patients to complain of a “tension”-like headache. Patients often will describe a band-like sensation around their head, as if wearing a tight hat. These symptoms do not represent true emergencies, and patients do not typically describe them as “severe.” Sinus or stress-related headaches or migraines also are common. The patient often describes such headaches with symptoms of pressure over their sinus areas. This type of headache may occur after a recent upper respiratory infection. Many patients suffering from migraine headaches are very aware of the symptoms when their migraines are occurring and can pinpoint the pain to the migraine.

The chief problem is that in rare cases, a headache may represent a vision issue or life-threatening problem. Some of these conditions include giant cell arteritis, angle-closure glaucoma, malignant hypertension, subarachnoid hemorrhage, increased intracranial pressure (papilledema), brain tumor, meningitis, etc. In these cases, the typical patient will describe more severe pain. It is difficult to separate a true emergency from a more benign problem; therefore, it is critical for triage staff to listen and take all complaints of headaches seriously. In questionable cases, it is advisable to consult the physician.

For patients with complaints of severe headaches, the following symptoms are indicators of a potentially serious condition. Immediate attention is warranted if a patient complains of any of the following:

- Scalp tenderness
- Decreased vision
- Fever
- Rapid weight loss
- Numbness

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- Nausea
- Pain with chewing
- Altered behavior
- History of trauma or recent surgery
- Any patient who complains of the “worst headache I have had in my life”
- Headaches that change in intensity when the patient’s positioning changes (example: changing position from prone to standing)
- Headaches that wake a person from sleep
- Headaches that do not respond to normal pain medication

Triage questions:

1. How long have you had the headache?
2. Is it constant or intermittent?
3. When during the day do you notice the headache?
4. Is it gradual or sudden onset?

Many of the symptoms above *might* indicate problems not directly related to the eye. However, it is the obligation of the physician to evaluate the condition and to refer patients for additional testing or for evaluation by a different subspecialist, if indicated.

Summary: Triaging patients with headaches

1. If possible, try to determine the severity of the headache, paying particular attention to the above signs and symptoms.
2. See all patients on a same-day basis, and consider all headache complaints serious until the physician determines otherwise.

Level of urgency: Urgent

Itching

Itching is the hallmark of an allergic reaction. This might be seasonal or possibly due to exposure to specific allergens (eye drops, animals, dust, etc.). Other possible causes include conjunctivitis, blepharitis, dry eyes, or contact lens sensitivity. In the vast majority of cases, itching is not an emergency without the presence of other symptoms, such as vision loss, discharge, painful eyes or any combination of those symptoms.

In some cases, it is possible to address complaints of itching over the telephone. (For example, if the patient was recently prescribed a new medication and now suffers from itching.) After discussion with the physician, the patient may discontinue using the new medication and try an alternative medication per the physician’s recommendation. Another example might include a patient with a known history of seasonal allergies, in which case the physician might simply phone in a prescription.

Triaging Ocular Emergencies

Triage questions:

1. Are your eyes red?
2. Are you taking a new medication (ocular or systemic)?
3. Is there a change in your vision?

Summary: Triaging patients with itching

1. Assure patient that itching is not an emergency.
2. Consult with the physician for a recommendation, if appropriate.
3. Schedule the patient as soon as the schedule allows.

Level of urgency: Semi-urgent

Lid and/or Orbital Swelling

When a patient complains of a swollen eyelid, the first question to ask is whether there is associated pain. If there is, it is necessary to see the patient on the same day. Otherwise, schedule the patient when an appointment is available. However, there is one urgent condition, orbital cellulitis, which requires immediate evaluation in all cases of orbital swelling.

Orbital cellulitis is a dangerous condition that occurs because of the easy access to the brain and meninges via the thin bones of the orbit. The most common cause of orbital cellulitis is sinusitis. Because the bones of the orbit that separate the orbit and the sinuses are very thin, a sinus infection can invade the orbit and potentially the brain. In addition to sinus infections, other conditions, such as dental abscesses, dacryocystitis, and ear infections also can lead to orbital cellulitis. These patients systemically feel sick and often present with a general malaise. Symptoms associated with orbital cellulitis include:

- pain on eye movement.
- noticeable proptosis.
- potential visual disturbances.

Orbital cellulitis is an urgent condition and requires same-day evaluation. Pain is the primary difference between orbital cellulitis and preseptal cellulitis. Preseptal cellulitis is less urgent and is often the result of a traumatic event, such as a laceration that allows an infection access into the lid or orbit. It may also result from bug bites, foreign bodies, or any facial infections in the orbit area. Patients may complain of a swollen, red, and tender eyelid; however, there is no pain associated with movement. Because lid swelling can have a wide range of implications, it is easiest to start with “basic” triage questioning and then continue into more advanced questioning depending on how the patient responds.

Triage questions:

1. Is your lid tender to the touch, or does the area feel hard and round like a BB?
2. Do you have any discharge from the lid or eye?
3. Does your lid itch?
4. Have you had any recent trauma to your lid or a bug bite?
5. Do you wear contact lenses?

Triaging Ocular Emergencies

Common causes of painful lid swelling include hordeolum (stye), blepharitis, contact dermatitis, conjunctivitis, preseptal cellulitis, and trauma. While none of these represents an actual emergency, they still require evaluation on a same-day basis to ensure that patients do not have a more serious and potentially life-threatening condition, such as orbital cellulitis or a tumor. Painless lid swelling is not an emergency. An example of painless lid swelling would be a chalazion.

Summary: Triage patients with lid swelling

1. Determine if pain is associated with lid swelling.
2. Schedule patients experiencing pain on the same day.
3. Schedule patients with non-painful lid swelling in one to two days.

Level of urgency: Urgent to semi-urgent



Orbital/preseptal cellulitis.

Lid Twitch (Myokymia) or Blepharospasm

Myokymia, or an eyelid twitch, can range from mild to severe, wherein patients uncontrollably squeeze both eyes shut. Eyelid twitching alarms some patients, whereas others may barely notice the condition. Common causes include fatigue, lack of sleep, excess caffeine, corneal or conjunctival irritation, dry eyes, or a potassium deficiency. Determining the cause of the eyelid twitch can be very difficult; however, this condition does not represent an urgent issue and can be scheduled in the next available time slot.

Blepharospasm, on the other hand, is an involuntary and sustained contraction of the muscles around the eyes causing a forceable squeezing of the eyelid(s). The symptoms are often severe enough to result in functional blindness. Patients have normal eyes, but for periods of time are effectively blind due to their inability to open their eyelids. In severe cases, blepharospasm can place pressure on the lacrimal gland, as well as affect the intraocular pressure of the eye. While not urgent, a patient complaining of blepharospasm should be evaluated within a week to ensure that there is no risk to the eye.

Triage questions:

1. Is the twitch in one eye or both?
2. Is it intermittent and occasional, or more regular?
3. Does it hurt, or more of a nuisance?

Triaging Ocular Emergencies

Summary: Triaging patients with lid twitch or blepharospasm

1. Try to ascertain if the patient is experiencing a simple “twitch” or is forcibly squeezing the eyelid shut.
2. Assure the patient that there is no emergency.
3. Schedule an appointment at the next available time slot, within a week at least.

Level of urgency: Semi-urgent to routine

Light Sensitivity or Photophobia

It is important to distinguish true photophobia from glare and/or halos. Patients with photophobia often describe pain with bright lights. Many times this prevents them from going outdoors or functioning in bright environments. Cases of true photophobia often represent urgent conditions such as uveitis (inflammation within the eye), angle closure glaucoma, aphakic or pseudophakic bullous keratopathy, severe conjunctivitis, and certain central nervous system disorders. Patients with this complaint should be seen as soon as possible.

It should be noted that ocular surgery patients often complain of photophobia for a few days after the procedure. This condition may be to the result of surgically induced inflammation. The distinction between this condition and an urgent situation is that postoperative patients should take medication to help control the inflammation, and their symptoms should improve from day to day. If a post-operative patient describes photophobia that continues to get worse, they should be seen urgently.

Triage questions:

1. Does it hurt to keep your eyes open?
2. Do you feel like something is in your eye?
3. Have you had eye surgery recently? (If so, when?)

Summary: Triaging patients with light sensitivity or photophobia

1. Schedule patients with true photophobia immediately.

Level of urgency: Immediate

Pain

No complaint is more subjective than pain. It is difficult to determine how much pain a patient feels over the phone. Two routine questions:

1. On a scale of one to 10, how painful is your eye?
2. Can you describe the type of pain? Is it a dull pain, a sharp stabbing pain, or a throbbing pain?

While the responses will be subjective and subject to the patient’s pain tolerance, these two questions represent a start in trying to determine the severity of the pain.

Triage questions:

1. What were you doing when the pain began?
2. How long have you experienced the pain?
3. Is the pain in one eye or in both eyes?

Triaging Ocular Emergencies

4. Did the pain have a sudden onset or was it gradual?
5. Are you experiencing any problems with your vision?

When should patients with complaints of eye pain be scheduled for evaluation? A good rule of thumb is, "When in doubt, check it out!" You should see the patient who states "I can't open my eye, and the pain is making me nauseated," immediately, whereas someone who says "my eye gets irritated and burns, but only when I read," may wait until the next available appointment. Though its causes are numerous, ocular pain is usually an emergency.

Summary: Triage patients with ocular pain

1. If possible, try to determine the level of the patient's pain.
2. Use your best judgment to determine when the patient needs to be seen.
3. Always see the patient immediately if the patient complains of vision loss.
4. Consult with a physician if the urgency of the patient's condition is unclear.

Level of urgency: Based on subjective pain scale

Penetrating Trauma

Any patient calling with a potential penetrating eye trauma should either be seen immediately, referred to an appropriate specialist, or directed to the nearest emergency room. Examples of penetrating injuries may include fishhooks, nails, sticks, pencils, etc. In triaging a call concerning an injury such as this, *make sure to provide clear instructions to leave the object in the eye!* The patient must be informed that more damage potentially can be caused by attempting to remove the object. This situation is considered a true emergency and should be treated as such.

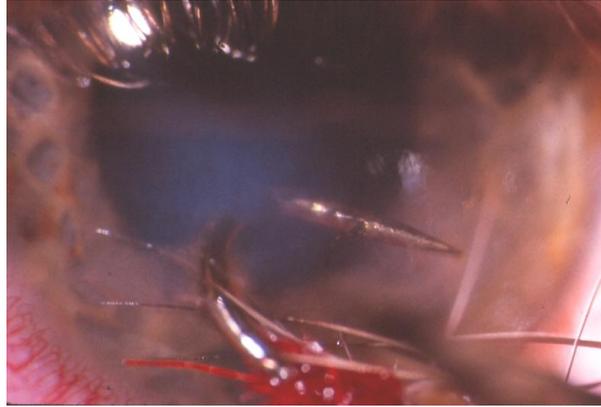
A properly equipped facility should treat all penetrating foreign objects. It is important to stabilize the patient and the object immediately, taking care to avoid putting any pressure on the foreign object. A paper cup taped over the eye will prevent the patient from touching the eye and potentially prevent further damage until the patient can be evaluated by the physician.

Summary: Triage patients with penetrating trauma

1. Instruct patient to leave the object in the eye and to avoid putting any pressure on the eye!
2. See the patient immediately if the practice has a physician trained to treat this type of injury, or refer to a specialist.
3. Refer the patient to the closest emergency room if a physician is not available immediately.

Level of urgency: Immediate or refer to ER

Triaging Ocular Emergencies



Fishhook injury.



Screw to eye. Source: livingitfit.blogspot.com.

Ptosis or “Droopy Eyelid”

Ptosis, the drooping of the upper eyelid, can be congenital or acquired, traumatic, or simply a function of aging. Ptosis can be unilateral or bilateral, and is commonly due to an eyelid muscle problem. Acquired ptosis is often the result of systemic diseases that impair the cranial nerves, diabetes, trauma, tumors, or brain aneurysms. A complaint of a “droopy eyelid”, while not usually a cause for immediate care, *may* represent significant pathology, especially if the cause is from trauma or ocular surgery. Other causes of droopy eyelid are congenital or more serious neurological problems that may include myasthenia gravis, Horner’s syndrome, and Cranial Nerve 3 (CN III) palsies. Unless the complaint of a lid droop is accompanied by sudden loss of vision, sudden diplopia, or pain, it is usually not an emergency.

Triage questions:

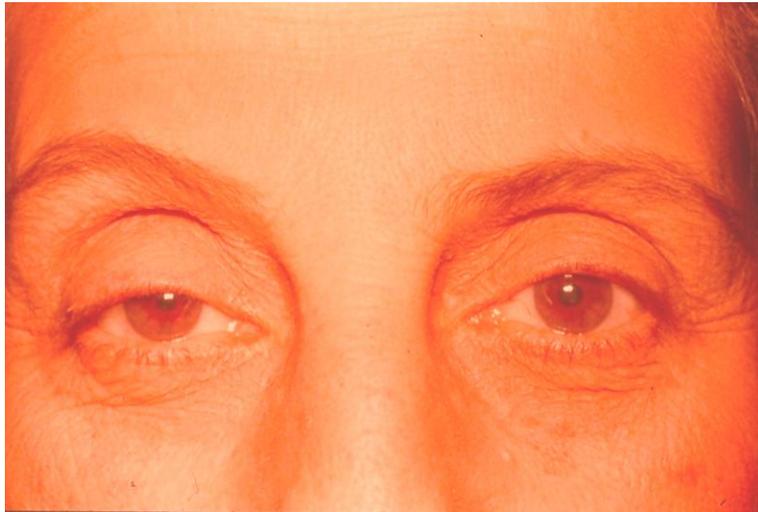
1. When did you first notice the “drooping” eyelid?
2. Is one lid drooping, or both?
3. Do you have diabetes?
4. Do you have any pain with eye movement?
5. Has your vision changed since the eyelid has drooped?

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Summary: Triaging patients with ptosis or “droopy eyelid”

1. Schedule the patient immediately if the lid droop accompanies sudden loss of vision, sudden diplopia, or pain.
2. Schedule the patient with non-urgent symptoms within the week or at the next available appointment.

Level of urgency: Immediate to routine



Ptosis.



Diabetic III nerve ptosis. Source: aafp.org.

Red or “Bleeding” Eye

Eye practices frequently receive calls from patients expressing great concern regarding blood in their eyes. Patients are usually alarmed because of the appearance of the eye; however, this condition is usually non-urgent and may be due to a subconjunctival hemorrhage, which is a broken blood vessel in the white part of the eye. usually the result of trauma, a cough or sneeze, or possibly physical exertion. However, it may also be idiopathic. While very disconcerting to patients because of the sometimes dramatic appearance, it rarely requires treatment, as these generally resolve spontaneously in one to three weeks. Patients, however, are often panic-stricken, and might insist on immediate help. It is like a bruise under the skin but not covered by flesh tones.

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In addition to subconjunctival hemorrhages, other causes of redness may include conjunctivitis (usually with discharge), allergies (itching), episcleritis or scleritis (mild to moderate pain), corneal ulcers (severe pain), and angle-closure glaucoma (pain and nausea). Some ocular redness might actually represent an emergency, but most serious problems produce other symptoms in addition to “redness.” A red eye, therefore, *in absence of other symptoms*, is rarely an emergency.

Triage questions:

1. Have you had any eye trauma?
2. Have you been coughing or sneezing recently?
3. Do you have any eye pain?
4. Are you on aspirin or other blood thinners?

Summary: Triaging patients with a red or “bleeding” eye

1. Ask if the patient is experiencing any pain or changes in vision. If so, schedule the patient immediately.
2. If no other symptoms are present, reassure the patient that the condition likely will resolve itself within the next few weeks.
3. Schedule a non-urgent evaluation if the patient continues to have concerns.

Level of urgency: Immediate or routine, based on presence of pain



Subconjunctival hemorrhage.

Tearing (Epiphora)

Tearing, or epiphora, is a common complaint and often represents a corneal surface problem or dry eye condition. In such cases, patients also might complain that their eyes burn at times. It is often difficult for patients to understand that their tearing may actually be a reaction to the dry state of the eye. In other cases, there may be a lacrimal duct obstruction, corneal abrasion, iritis or photophobia causing the epiphora. An examination by a qualified eye care physician is necessary to determine the cause of a patient's epiphora.

Even though tearing can be quite bothersome, it does not represent an ocular emergency unless associated with other symptoms such as pain, loss of vision, trauma, etc. Dry eye patients can require a

Triaging Ocular Emergencies

considerable amount of time and should not be booked as emergencies into a busy schedule. These patients should be scheduled appropriately at the next time available.

Triage questions:

1. Do your eyes tear constantly or intermittently?
2. Do you notice the tearing in one or in both of your eyes?
3. Do your eyes itch or burn?
4. Do you see any discharge coming from the eye?
5. Are you sensitive to light?

Summary: Triaging patients with tearing (epiphora)

1. Reassure the patient that tearing is not an emergency as long as there are no other contributing factors.
2. Schedule the patient for the next available appointment.

Level of urgency: Routine

CONCLUSION

Every practice encounters patients who feel they have an urgent complaint. It is essential that all staff, including receptionists, technicians, and any staff member triaging patient phone calls have adequate training and information to accurately triage patient phone calls. It is optimal for physicians to assist in the development of triage protocols to provide guidance as to proper handling of patient problems and concerns. Remember the simple rule of triage, “When in doubt — check it out!” If there is any question, it is important to consult with the physician for guidance.

The information in this course is simply a guide. In all cases, the doctor should review the protocols unique to the individual practice. For example, some doctors are comfortable treating a corneal laceration, whereas others might choose to refer the patient to another, more qualified, specialist. It is essential that you tailor the information in this course to make triage protocols practice-specific, to train staff properly in the established triage protocols, and to provide patients with the best care possible.

Triaging Ocular Emergencies

COURSE EXAMINATION

1. The definition of “triage” is:
 - a. Answering the phone in a medical emergency.
 - b. A system establishing the order in which to carry out acts of medical assistance in an emergency.
 - c. Treating emergency patients.
 - d. Performing house calls.

2. Complications of blunt trauma to the eye include all except:
 - a. Hyphema.
 - b. Glaucoma.
 - c. Hyperopia.
 - d. Ecchymosis.

3. In a chemical splash injury, the first thing you should instruct the patient to do is:
 - a. Immediately flush out the eye with water for 10-15 minutes.
 - b. Come immediately to your office.
 - c. Go to the emergency room.
 - d. Ask if the patient would like to schedule at the next available appointment.

4. All of the following are examples of alkalis that can cause eye burns, except:
 - a. Lye.
 - b. Concrete.
 - c. Battery acid.
 - d. Lawn fertilizer.

5. If a patient calls complaining of a scratched eye, you should:
 - a. See the patient that same day.
 - b. Instruct the patient to not use any drops.
 - c. Instruct the patient not to remove the contact lenses.
 - d. All of the above.

6. Patients complaining of discharge from their eyes in combination with an upper respiratory infection require evaluation for:
 - a. Bacterial infection.
 - b. Adenovirus.
 - c. Meibomian gland dysfunction.
 - d. Blepharitis.

7. The following statements about double vision are true except:
 - a. Monocular diplopia typically does not represent an emergency.
 - b. Binocular diplopia presents only when a patient has one eye open.
 - c. Acute, binocular diplopia needs to be seen on the same day.
 - d. Long-standing diplopia is not an emergency.

8. All of the following can cause flashing lights, except:
 - a. Posterior vitreous detachment.
 - b. Uveitis.
 - c. Retinal detachment.
 - d. Ocular migraines.

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9. Mucous discharge may represent all of the following except:
- Blepharitis.
 - Allergy.
 - Bacterial infection.
 - Viral infection.
10. The following symptoms all warrant same-day evaluation except:
- Itching.
 - Flashes.
 - Floater.
 - Sudden loss of vision.
11. The following are true of orbital cellulitis, except:
- It is more common than preseptal cellulitis.
 - It can result from a dental abscess.
 - It causes pain on eye movement.
 - It causes the patient to feel ill.
12. The following symptoms can be scheduled in the next available time slot except:
- Itching.
 - Glare.
 - Pain.
 - Halos.
13. If a patient complains of a headache, the following associated symptoms may indicate an emergency, except:
- Long-standing diplopia.
 - Scalp tenderness.
 - Decreased vision.
 - Nausea.
14. The following is true of blepharospasm except:
- The patient can be considered legally blind due to eye damage in severe cases.
 - The patient can be considered functionally blind in severe cases.
 - Intraocular eye pressure can be mechanically elevated.
 - Blepharospasm can be a socially debilitating problem.
15. The most important condition to rule out in a case of painful lid swelling is:
- Hordeolum.
 - Orbital cellulitis.
 - Contact dermatitis.
 - Conjunctivitis.
16. The following are all common causes of lid twitching except:
- Excess caffeine.
 - Hyperopia.
 - Lack of sleep.
 - Dry eyes.

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17. In a penetrating injury to the eye:
- Instruct the patient to remove the object immediately.
 - Wash the eye out with water.
 - Instruct the patient to leave the object in the eye.
 - Panic.
18. A “Droopy Eyelid” is not an emergency unless accompanied by:
- Sudden vision loss.
 - Pain.
 - Diplopia.
 - All of the above.
19. The following are all true about a subconjunctival hemorrhage except:
- It can be the result of trauma.
 - It is typically not an emergency.
 - It can be due to a cough or sneeze.
 - It usually results in loss of vision.
20. The following is true of epiphora (excess tearing):
- You should consider it an emergency.
 - It is usually a sign of cataracts.
 - It is typically due to dry eyes.
 - All of the above.