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Iraqi Ministry of Health
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Guideline for Primary Health Care Physicians

Primary Eye Care

IRAQ

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دائرة الصحة العامة
Public Health Directorate

Contributors in Guideline for Training Physicians in Primary Health Care Centers on Primary Eye Care:

- Dr. Mohammed Hamza Ahmed / Consultant Ophthalmologist / Senior Subspecialist Ophthalmologist in Corneal Disease and Refractive Surgery
- Dr.Ban A. Shanan / Dentist / intermediate Field epidemiology training program / CDC Atlanta / Eye Care Unite, Non Communicable Prevention & Control Department, Directorate of Public Health, MOH
- Ibtesam A. Hamel / Optometrist / Eye Care Unite, Non Communicable Prevention & Control Department, Directorate of Public Health, MOH
- Abdulrahman I. Hussein / Optometrist / Eye Care Unite, Non Communicable Prevention & Control Department, Directorate of Public Health, MOH

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Introduction

Blindness refers to a complete loss of vision or visual acuity of less than 3/60 in the better-seeing eye, even with the use of corrective lenses. In Iraq, blindness is a significant public health issue, with many people suffering from vision impairment and blindness.

The national survey of the risk factors for non-transitional diseases implemented in 2015, the blindness rate decreased to 0.2%, the visual impairment rate was 3.5% and the severe visual impairment was 0.8%

-Rapid assessment of avoidable blindness. (RAAB), which was carried out in 2008 and 2010 in Iraq, the percentage of blind people in the age group (50 years and older) reaches 3.286. The causes of the most common blindness: cataract, diabetic retinopathy, glaucoma, refractive errors, corneal opacity (mostly due to injuries).

However, other causes cannot be ignored. While many eye diseases can be stopped (such as trauma, bacterial infection, use of hazardous traditional medicines, perinatal disorders, nutrition-related conditions, and hazardous use or self-administration treatment), this is not possible for all. Each eye problem demands a different, early response. Access to Primary eye care in Iraq faces several challenges, particularly in remote and rural areas. Due to the country's political and economic situation and there is a shortage of trained eye care professionals and equipment. However, efforts are being made to improve access to eye care services and prevent blindness in Iraq. The ministry of health has implemented a national eye health plan, which aims to provide comprehensive eye care services to all Iraqis, at primary health care centers. The plan includes training healthcare workers in basic eye care, establishing eye care centers, and promoting public awareness about eye health and preventive measures.

The following are features of healthy eyes:-.

- the eyelids should open and close properly;
- vision should be good;
- the white part (conjunctiva) should look white and smooth;
- the central part (cornea) should be clear;
- The pupil should be black and should react to light.

Primary eye care

Primary eye care refers to the first level of eye care that is typically provided by primary care physicians, optometrists, and ophthalmologists. It involves the diagnosis, treatment, and management of common eye problems and conditions, as well as the promotion of eye health and prevention of eye diseases. Primary eye care services may include routine eye exams, vision screenings, prescribing and

fitting eyeglasses and contact lenses, treatment of common eye conditions such as conjunctivitis and dry eye, and referral to a specialist for more complex eye problems. Primary eye care is an important aspect of overall health care as vision problems can affect a person's daily activities, work performance, and quality of life. Regular eye exams can help detect eye problems early on, and preventive measures such as wearing protective eyewear and maintaining a healthy lifestyle can help reduce the risk of developing eye diseases. It is essential for physicians to have a basic understanding of eye care in order to identify and manage these conditions, as well as refer patients to ophthalmologists or optometrists as needed. Service integrated within the primary health care services.

Centers distributed throughout the country which provide eye care services for the whole community these services include:-

a- Strengthening integration of primary eye care into existing programs.

b- School enrollment visual screening in collaboration with school health program

c- Preschool child eye examination in collaboration with MCH program (0-5 years)

d- Visual screening for elderly in collaboration with aged care.

e- Prevention of trachoma among the new born.

f- Provision of spectacles for school children and other institutionalized in need.

Some key topics that should be known by physicians who provide primary eye care services include

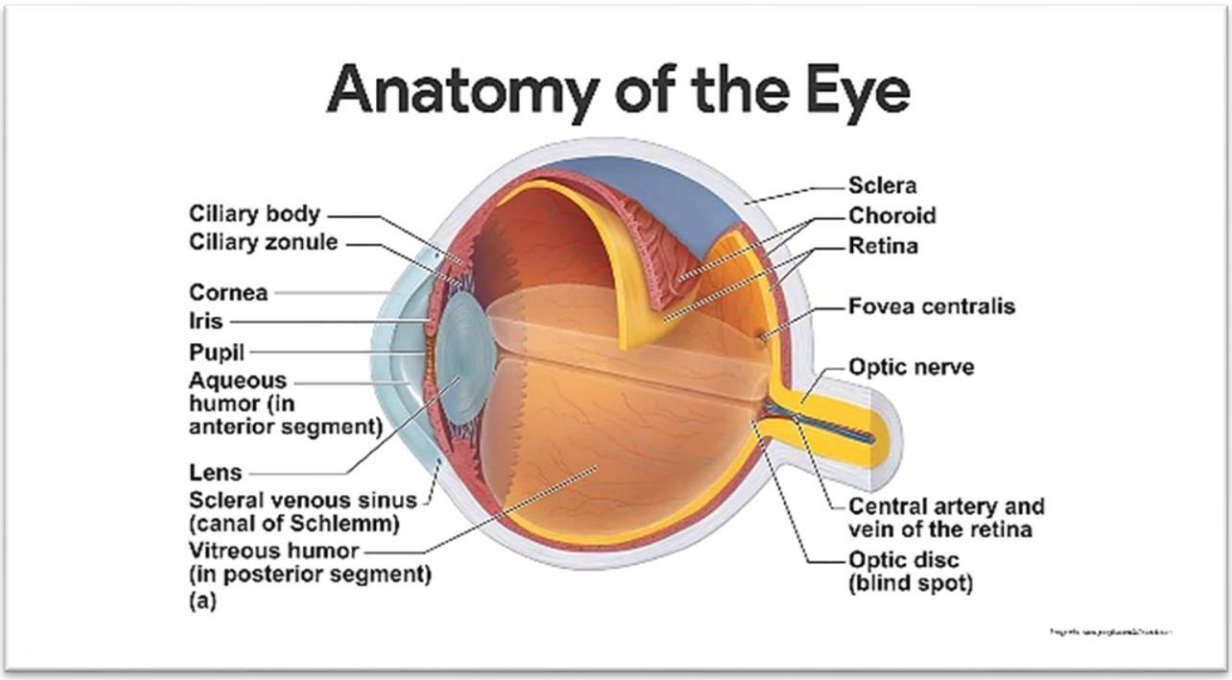
1. Anatomy and physiology of the eye.
2. Take a detailed history: When a patient presents with an eye problem, it is important to take a detailed history of the problem, including the duration of symptoms, any associated pain or discomfort, and any previous eye problems or surgeries.
3. Perform a comprehensive eye examination: A comprehensive eye examination should include an assessment of visual acuity, eye movements, pupillary

reactions, intraocular pressure, and an examination of the anterior and posterior segments of the eye.
4. Recognize common eye conditions: As a physician, it is important to be able to recognize common eye conditions such as conjunctivitis, dry eye syndrome, cataracts, and glaucoma.
5. Eye examination techniques, including the use of the ophthalmoscope and slit lamp.
6. Prescribe appropriate medications: Depending on the diagnosis.
7. Referral criteria for ophthalmologists and optometrists.
8. Communication with patients about their eye health and treatment options.
9. Coordination of care with other healthcare providers as needed.

Anatomy and physiology of the eye

The eye is a complex organ responsible for receiving visual information and transmitting it to the brain for interpretation. The eye is composed of several structures that work together to provide vision. The eye can be divided into three layers: the outer layer, middle layer, and inner layer.
Outer layer: The outer layer of the eye includes the cornea, sclera, conjunctiva, and eyelids.
Cornea: The cornea is the clear, dome-shaped surface at the front of the eye. It helps to focus light into the eye and protects the eye from injury.
Sclera: The sclera is the tough, white outer layer that surrounds the eyeball. It provides protection and support for the eye.
Conjunctiva: The conjunctiva is a thin, transparent membrane that covers the sclera and lines the inside of the eyelids.
Eyelids: The eyelids are folds of skin that protect the eye and help to spread tears over the surface of the eye.
Middle layer: The middle layer of the eye includes the iris, ciliary body, and choroid.
Iris: The iris is the colored part of the eye that surrounds the pupil. It controls the amount of light that enters the eye by adjusting the size of the pupil.
Ciliary body: The ciliary body is a ring-shaped structure located behind the iris. It produces aqueous humor, which helps to maintain the shape of the eye and provides nutrients to the lens and cornea.
Choroid: The choroid is a layer of blood vessels that supply nutrients and oxygen to the retina.
Inner layer: The inner layer of the eye includes the retina, optic nerve, and vitreous body.
Retina: The retina is a layer of tissue located at the back of the eye. It contains photoreceptor cells called rods and cones, which convert light into electrical signals that are transmitted to the brain through the optic nerve.

Optic nerve: The optic nerve is a bundle of nerve fibers that carries visual information from the retina to the brain.
Vitreous body: The vitreous body is a clear, gel-like substance that fills the space between the lens and the retina. It helps to maintain the shape of the eye and supports the retina.
Overall, the anatomy of the eye is complex and involves several structures that work together to produce vision. Each structure plays an important role in the process of vision, from focusing light onto the retina to transmitting visual information to the brain.



The physiology of the eye refers to the mechanisms and processes that allow the eye to function properly. These include the process of vision, the mechanisms of eye movement, and the control of the amount of light that enters the eye.

- Process of Vision: The process of vision begins when light enters the eye and is focused onto the retina by the cornea and lens. The photoreceptor cells in the retina, called rods and cones, convert the light into electrical signals. These signals are transmitted to the brain through the optic nerve, where they are interpreted as visual information.
- Eye Movements: The eye is capable of several types of movements, including saccades, smooth pursuit, and vestibular-ocular reflex. Saccades are rapid eye movements that allow the eye to quickly move from one point to another. Smooth pursuit movements allow the eye to track moving objects. Vestibule-ocular reflex helps to stabilize visual images during head movements.

- Control of Light: The amount of light that enters the eye is controlled by the iris and the pupil. The iris contains muscles that can adjust the size of the pupil, allowing more or less light to enter the eye. This process is known as the pupillary reflex. In bright light, the pupil constricts to reduce the amount of light that enters the eye, while in dim light, the pupil dilates to allow more light to enter the eye.
- Accommodation: Accommodation is the process by which the eye adjusts the focus of the lens to maintain a clear image of objects at different distances. The ciliary muscle in the eye changes the shape of the lens to adjust the focus. This process is important for clear vision at different distances.
- Color Vision: Color vision is mediated by the cones in the retina. Three types of cones are sensitive to different wavelengths of light, which allows us to perceive different colors. Color blindness can occur when one or more types of cones are missing or not functioning properly.

A comprehensive eye examination is a thorough evaluation of the eyes and visual system. It is typically performed by an optometrist or ophthalmologist a comprehensive eye exam is important for maintaining good eye health and detecting any problems early on. The frequency of eye exams will depend on your age, family history, and overall health status, but it is generally recommended to have a comprehensive eye exam every 1-2 years. And may include the following tests:

- Visual acuity test: This test measures how well you can see at different distances using an eye chart. You will be asked to read letters or numbers on the chart from a certain distance.

- Refraction test: This test determines the proper prescription for eyeglasses or contact lenses by measuring the way light enters the eye and is focused by the lens.

- Binocular vision assessment: This test measures how well the eyes work together as a team and can detect problems such as amblyopia (lazy eye), strabismus (eye turn), or convergence insufficiency (difficulty focusing up close).

- Eye muscle test: This test assesses the muscles that control eye movement and alignment, and can detect problems such as eye muscle weakness or paralysis.

- Slit-lamp exam by ophthalmologist: This exam uses a microscope with a narrow beam of light to examine the structures of the eye, including the cornea, iris, lens, and retina.

- Dilated eye exam by ophthalmologist: This exam involves the use of eye drops to dilate the pupil, allowing the doctor to examine the retina and optic nerve for signs of eye diseases such as glaucoma, macular degeneration, and diabetic retinopathy.

- Tonometry: This test measures the pressure inside the eye, which is an important screening test for glaucoma.

- Color vision test: This test checks your ability to distinguish between different colors and can detect color blindness.

Classification of severity of vision impairment based on visual acuity in the better eye

Category	Visual acuity in the better eye	
	Worse than:	Equal to or better than:
Mild vision impairment	6/12	6/18
Moderate vision impairment	6/18	6/60
Severe vision impairment	6/60	3/60
Blindness	3/60	
Near vision impairment	N6 or M 0.8 at 40cm	

Vision and eye problems screening in children

Vision screening in pre-school children

- The project vision screening for pre-school children has started at selected PHCC for detection of abnormal visual function or conditions, utilizing techniques according to age from birth to school age.
- The required instruments and supplies for the PHCC are provided from MOH and DOHs.
- Implementation is carried out as a joint work between NCD, MCH and Vaccination programs (pre-school age child's eye screening).

Check for eye problem

Ask the parents:

- Eye redness or discharge.
- Swelling of the eyelids.

Observation and inspection:

- Eye redness
- Eye discharge
- Swelling of the eyelids
- Eyelid droops

It is also important for parents and caregivers to be aware of the signs and symptoms of potential vision problems in children, such as

- Frequent eye rubbing or blinking
- Squinting, head tilting, or covering one eye
- Difficulty reading or performing close-up tasks
- Holding objects too close or too far away
- Sensitivity to light or excessive tearing
- Eye pain, redness, or swelling

If any of these symptoms are present, parents or caregivers should seek medical attention from a pediatrician or an eye doctor as soon as possible. Overall, regular vision and eye problems screening in children can help detect and treat any potential problems early on, leading to better visual outcomes and improved overall health and well-being.

Common eye conditions

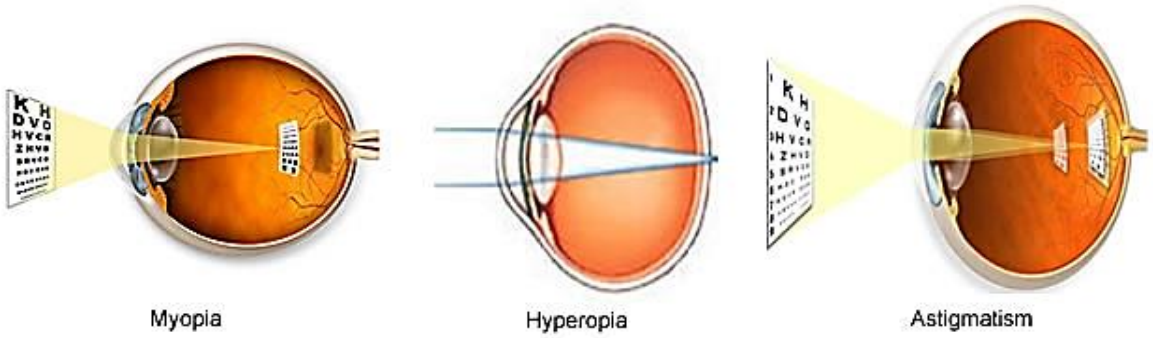
There are several common eye conditions that can affect people of all ages.

1. Common eye conditions that do not typically cause vision impairment:

    - **Blepharitis**: Inflammation of the eyelids near the base of the eyelashes characterized by redness and irritation of the eye and eyelid.
    - **Chalazion and hordeolum (stye)**: Common eyelid disorders resulting from a blocked gland or localized infection that can cause pain.
    - **Conjunctivitis**: Inflammation of the conjunctiva (the clear membrane lining the inside of the eyelids and covers the white part of the eye) most commonly caused by allergy or infection.
    - **Dry eye**: Due to an inadequate tear production that can result in irritation and blurred vision.
    - **Pterygium and pinguecula**: abnormal growths on the conjunctiva that can cause pain. In advanced cases, pterygium can encroach on the cornea and cause vision loss.
    - **Subconjunctival haemorrhage**: broken blood vessels underneath the conjunctiva.

2. Common eye conditions that can cause vision impairment including blindness:
    - **Age-related macular degeneration**: Damage to the central part of the retina responsible for detailed vision leads to dark patches, shadows or distortion of the central vision. The risk of developing macular degeneration increases with age.
    - **Cataract**: Cloudiness in the lens of the eye, leading to increasingly blurred vision. The risk of developing cataract increases with age.
    - **Corneal opacity**: A group of conditions causing the cornea to become scarred or cloudy. Opacity is most commonly caused by injury, infection or vitamin A deficiency in children.

- **Diabetic retinopathy**: Damage to blood vessels in the retina which become leaky or blocked. Vision loss most commonly occurs due to swelling in the central part of the retina which can lead to vision impairment. Abnormal blood vessels can also grow from the retina, which can bleed or cause scarring of the retina and blindness.
- **Glaucoma**: This is a group of eye diseases that damage the optic nerve, often due to increased pressure in the eye. It can cause vision loss and blindness if left untreated.
- **Refractive error**: Due to an abnormal shape or length of the eye ball; light does not focus on the retina resulting in blurred vision. There are several types of refractive error:



  - **Myopia (nearsightedness):** This is a refractive error where the eye focuses light in front of the retina, resulting in blurry distance vision.
  - **Hypermetropia (farsightedness):** This is a refractive error where the eye focuses light behind the retina, resulting in blurry close-up vision.
  - **Astigmatism**: This is a refractive error where the cornea is irregularly shaped, causing distorted or blurred vision at all distances.
  - **Presbyopia**: This is a condition where the lens of the eye becomes less flexible with age, resulting in difficulty focusing up close.

It's important to note that some of these conditions can be asymptomatic in the early stages, so regular eye exams are crucial for early detection and treatment.

Early detection of congenital and hereditary eye diseases

Is important for prompt treatment and management of the condition. Here are some ways to detect these conditions early:

- Family history: A family history of eye diseases can be an indicator of a higher risk of developing a congenital or hereditary eye disease. It is important to inform your eye doctor of any family history of eye diseases during your eye exams.

- Newborn screening: Some congenital eye diseases can be detected during newborn screening tests. These tests can detect conditions such as congenital cataracts, retinoblastoma, and congenital glaucoma.

- Eye exams: Regular eye exams can help detect congenital and hereditary eye diseases early on, even before symptoms appear. Eye exams can help identify conditions such as strabismus, amblyopia, and refractive errors.

- Behavioral and developmental assessment: Behavioral and developmental assessment can be useful for identifying early signs of visual impairment in infants and young children. These assessments can identify delays in visual development, such as delayed fixation, tracking, and visual attention.

It's important to note that early detection does not always mean a cure or treatment, but it can help manage and slow the progression of the disease. Regular eye exams, genetic testing, and behavioral and developmental assessments can all play a role in the early detection of congenital and hereditary eye diseases. And this can be done at the primary care level. Here are some steps that primary care providers can take to detect these conditions early:

1. Take a detailed family history: Ask about any family history of eye diseases, including conditions such as cataracts, glaucoma, retinal disorders, and strabismus.
2. Conduct a thorough physical exam: During routine physical exams, observe the child's eyes for any signs of abnormality such as a crossed or wandering eye. Also, observe how the child's eyes move and focus.
3. Perform a vision screening: who may have refractive errors, amblyopia, or strabismus.
4. Refer for further evaluation: Refer children with abnormal findings or positive family history to an eye care specialist for further evaluation. Eye specialists can conduct more detailed eye exams and perform additional tests such as genetic testing.
5. Educate parents on the importance of eye exams: Educate parents on the importance of regular eye exams for their children, especially if there is a

family history of eye disease. Encourage parents to bring their children for routine eye exams even if there are no obvious signs of eye problems.

6. Examine each eye separately, using binocular loupes (×2.5) and adequate lighting (either daylight or a torch). Signs must be clearly seen in order to be considered present.
7. The eyelids and cornea are observed first for in-turned eyelashes and any corneal opacity.
8. Examine the central part of the tarsal conjunctiva. The normal conjunctiva is pink, smooth, thin and transparent. Over the whole area of the tarsal conjunctiva there are normally large deep-lying blood vessels that run vertically

By taking these steps, primary care providers can help detect congenital and hereditary eye diseases early, which can lead to prompt treatment and management of the condition.

Primary eye care for school health
Involves identifying and treating eye problems in school-aged children. Here are some ways to provide primary eye care for school health:

- Vision screenings: Conduct regular vision screenings for all school-aged children to identify vision problems such as myopia, hyperopia, astigmatism, and amblyopia. Screenings can be done by the refractions, optometrist, teacher, Using Snellen chart, occlude with pinhole.

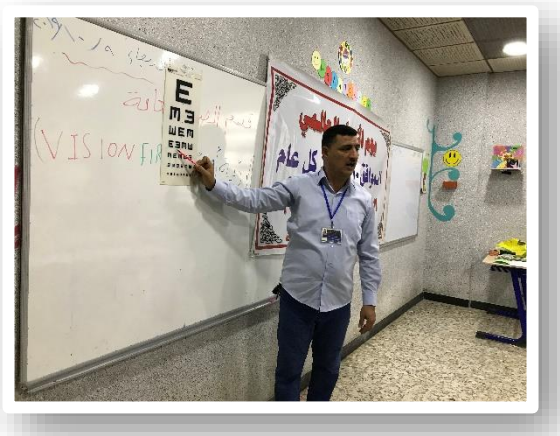
- Referral for comprehensive eye exams: Refer children who fail the vision screening or who have a history of eye problems to an eye care professional for a comprehensive eye exam. The exam should include a thorough evaluation of the eyes, vision, and ocular health.

- Education and awareness: Educate parents, teachers, and school staff on the importance of regular eye exams and early detection of eye problems. Promote healthy eye habits such as taking frequent breaks from screen time, wearing protective eyewear during sports and outdoor activities, and maintaining a healthy diet.

- Collaborate with eye care professionals: Establish partnerships with local eye care professionals to provide comprehensive eye exams and treatment for children who need it. Encourage parents to seek care from these professionals when necessary.

- Follow-up and monitoring: Follow up with children who have been identified with eye problems to ensure that they receive appropriate treatment and management. Monitor their progress and make necessary referrals for further evaluation or treatment.

By providing primary eye care for school health, we can help identify and treat vision problems in school-aged children, which can lead to improved academic performance and overall quality of life



.Guidelines on Management of the Common Eye disorder

❖ Cataract

Cataract is a common eye condition that occurs when the natural lens in the eye becomes cloudy or opaque, leading to blurry or dimmed vision. Cataracts are most commonly associated with aging, but can also be caused by trauma, certain medications, and other health conditions. Here are some key aspects of cataract diagnosis and treatment:

Symptoms: The symptoms of cataract can include blurry or cloudy vision, difficulty seeing at night, sensitivity to glare, and colors that appear faded.

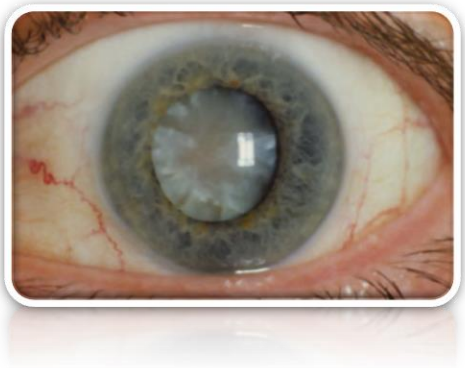
Diagnosis: Cataract can be diagnosed through a comprehensive eye exam that includes visual acuity testing, dilated eye exam, and other tests to evaluate the health of the eye and the extent of the cataract.

Prevention: While cataracts cannot always be prevented, wearing sunglasses with UV protection and eating a healthy diet may help reduce the risk of developing cataracts.

Screening: Primary care providers can conduct regular vision screenings to detect early signs of cataract and refer individuals for further evaluation if necessary.

Education: Primary care providers can educate patients about the importance of protecting their eyes from UV radiation, wearing protective eyewear during certain activities, and adopting a healthy lifestyle to reduce the risk of cataract.

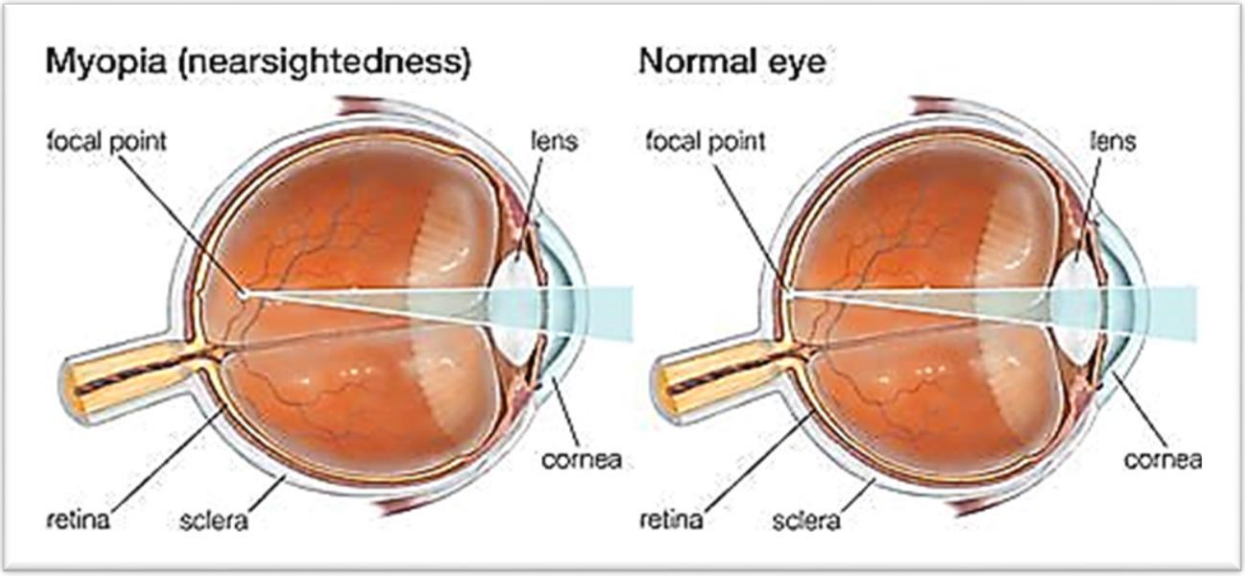
Referral: Primary care providers can refer patients with advanced or worsening cataract to an ophthalmologist for further evaluation and management, including cataract surgery.



❖ **Refractive error:**

1. **Myopia**

Myopia, also known as nearsightedness, is a common eye condition in which the eyes can focus on nearby objects, but have difficulty focusing on distant objects. This occurs when the eyeball is too long or the cornea (the clear front part of the eye) is too curved, causing light to focus in front of the retina instead of directly on it. Myopia is usually diagnosed during an eye exam and can be corrected with eyeglasses, contact lenses, or refractive surgery. In recent years, there has been an increase in the prevalence of myopia, particularly in younger people, which has been attributed to factors such as increased time spent indoors, less time spent outdoors, and increased near-work activities such as reading or using electronic devices.



Symptoms:
The most common symptom of myopia is a blurry vision when looking at distant objects, which may lead to eye strain, headaches, and difficulty seeing clearly while driving, watching television, or participating in sports. Children with myopia may also have difficulty seeing the blackboard in school or other distant objects.

Diagnosis:
Myopia is typically diagnosed during a comprehensive eye exam that includes a visual acuity test, a refraction test to measure the eye's ability to focus, and an examination of the retina and other structures at the back of the eye. It is important to have regular eye exams, especially for children and young adults, as early detection and treatment can help prevent the condition from getting worse.

Prevention:
There is no known way to prevent myopia, but some studies suggest that spending more time outdoors and engaging in activities that require distance vision may help reduce the risk of developing myopia, particularly in children. Additionally, it is important to maintain good eye health by eating a healthy diet, avoiding smoking, and protecting your eyes from injury and excessive UV exposure.

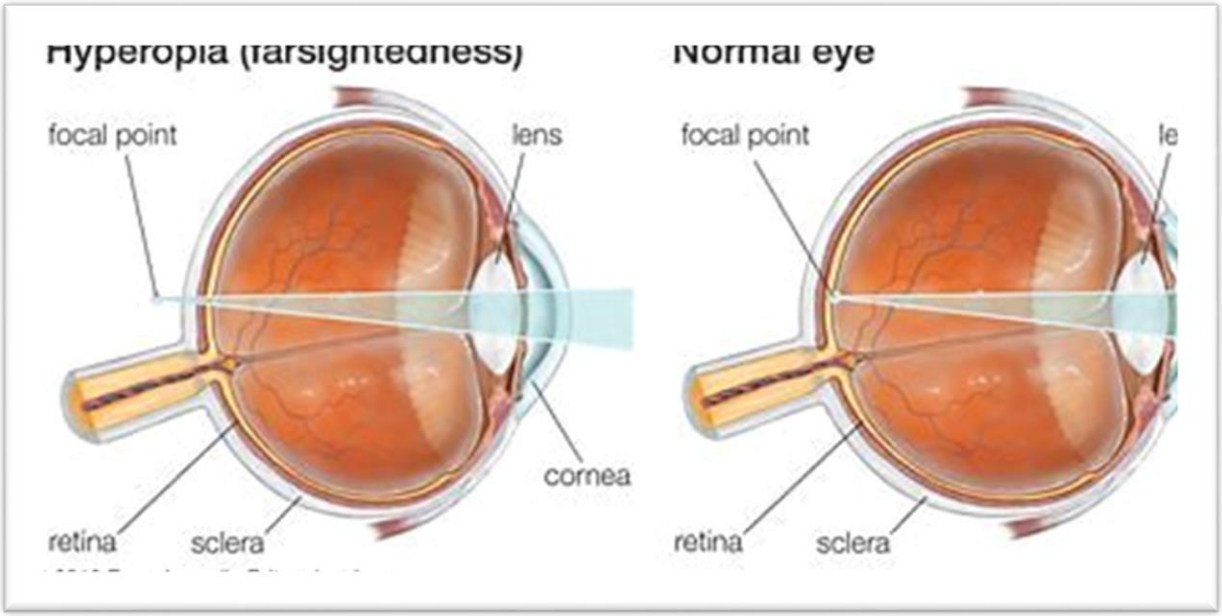
Screening:
Screening for myopia is typically done during routine eye exams, which are recommended every one to two years for adults and annually for children and teenagers. If you experience any symptoms of myopia, such as blurry vision or eye strain, it is important to schedule an eye exam as soon as possible.

Education:
Education about myopia can help individuals understand the condition, its symptoms, and the importance of regular eye exams. It can also help individuals make lifestyle changes that may help reduce the risk of developing myopia or slow its progression. Education may be provided by eye care professionals, schools, and community health programs.

Referral:
If myopia is detected during an eye exam, your eye care professional may refer you to an ophthalmologist or optometrist who specializes in the diagnosis and treatment of myopia. A referral may also be necessary if your myopia is severe or if you have other eye conditions that require more specialized treatment.

2. Hypermetropia

Hypermetropia also known as farsightedness, is a common eye condition in which the eyes can focus on distant objects more easily than on nearby objects. This occurs when the eyeball is too short or the cornea (the clear front part of the eye) is too flat, causing light to focus behind the retina instead of directly on it.



Symptoms:
The most common symptom of Hypermetropia is blurry vision when looking at objects up close, which may lead to eye strain, headaches, and difficulty reading or doing close work. People with hyperopia may also experience eye fatigue or discomfort after prolonged periods of reading or other near work.

Diagnosis:
Hypermetropia is typically diagnosed during a comprehensive eye exam that includes a visual acuity test, a refraction test to measure the eye's ability to focus, and an examination of the retina and other structures at the back of the eye. It is important to have regular eye exams, especially for children and young adults, as early detection and treatment can help prevent the condition from getting worse.

Prevention:
There is no known way to prevent Hypermetropia, but maintaining good eye health by eating a healthy diet, avoiding smoking, and protecting your eyes from injury and excessive UV exposure may help reduce the risk of developing certain eye conditions associated with Hypermetropia.

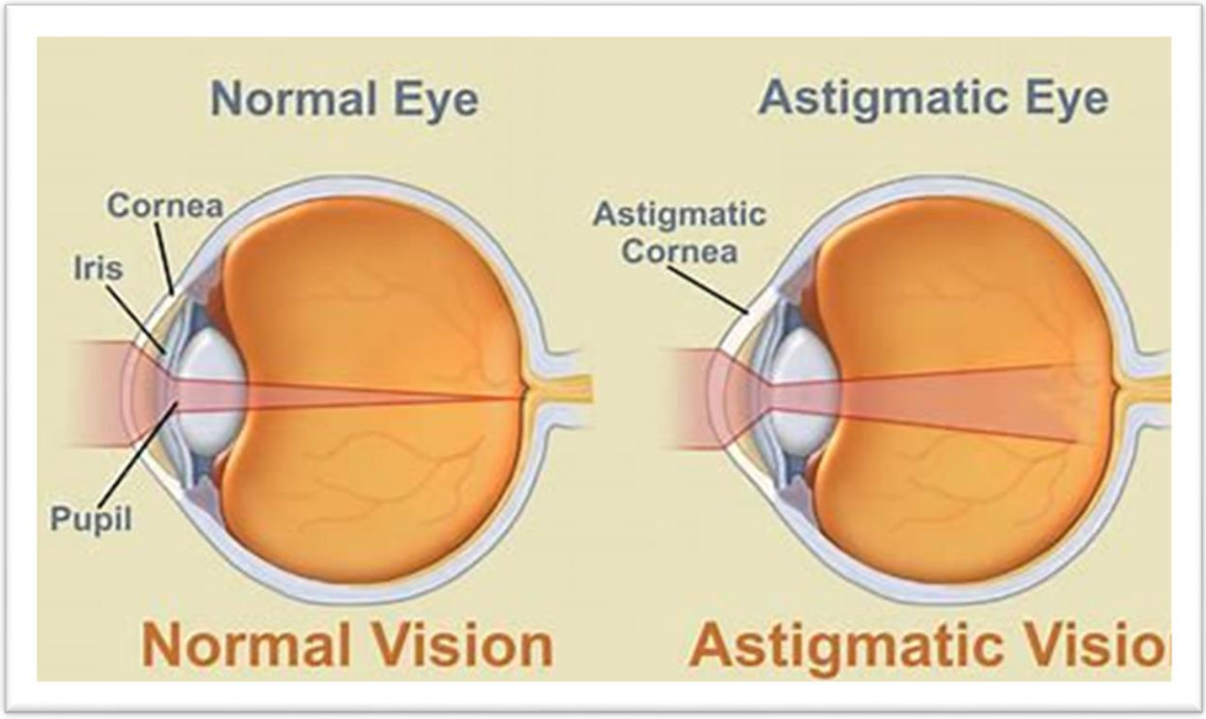
Screening:
Screening for Hypermetropia is typically done during routine eye exams, which are recommended every one to two years for adults and annually for children and teenagers. If you experience any symptoms of hyperopia, such as blurry vision or eye strain, it is important to schedule an eye exam as soon as possible.

Education:
Education about Hypermetropia can help individuals understand the condition, its symptoms, and the importance of regular eye exams. It can also help individuals make lifestyle changes that may help reduce the risk of developing certain eye conditions associated with hyperopia. Education may be provided by eye care professionals, schools, and community health programs.

Referral:
If Hypermetropia is detected during an eye exam, your eye care professional may refer you to an ophthalmologist or optometrist who specializes in the diagnosis and treatment of Hypermetropia. A referral may also be necessary if your Hypermetropia is severe or if you have other eye conditions that require more specialized treatment.

3. Astigmatism

Astigmatism is a common eye condition in which the cornea (the clear front part of the eye) or the lens inside the eye is irregularly shaped, causing light to focus unevenly on the retina at the back of the eye. This results in blurry or distorted vision, which can affect both near and far vision. Astigmatism can be present at birth or may develop later in life. It is often diagnosed during a routine eye exam, which includes a visual acuity test and a refraction test to measure the eye's ability to focus.



Symptoms:
Astigmatism is a common eye condition in which the eye is unable to focus light evenly on the retina, causing blurred or distorted vision at all distances. Common symptoms of astigmatism include blurry or distorted vision, eye strain, headaches, and difficulty seeing at night or in low light conditions.

Diagnosis:
Astigmatism can be diagnosed during a comprehensive eye exam that includes a visual acuity test, a refraction test to measure the eye's ability to focus, and an examination of the cornea and other structures at the front of the eye. It is important to have regular eye exams, especially for children and young adults, as early detection and treatment can help prevent the condition from getting worse.

Prevention:
There is no known way to prevent astigmatism, but maintaining good eye health by eating a healthy diet, avoiding smoking, and protecting your eyes from injury and excessive UV exposure may help reduce the risk of developing certain eye conditions associated with astigmatism.

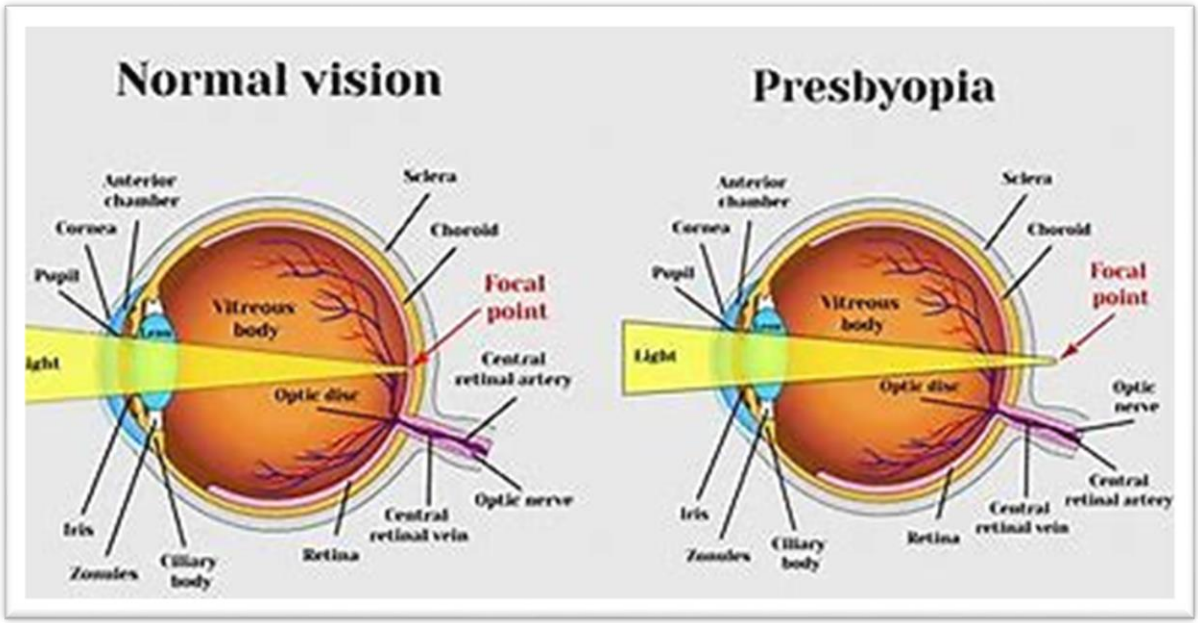
Screening:
Screening for astigmatism is typically done during routine eye exams, which are recommended every one to two years for adults and annually for children and teenagers. If you experience any symptoms of astigmatism, such as blurry vision or eye strain, it is important to schedule an eye exam as soon as possible.

Education:
Education about astigmatism can help individuals understand the condition, its symptoms, and the importance of regular eye exams. It can also help individuals make lifestyle changes that may help reduce the risk of developing certain eye conditions associated with astigmatism. Education may be provided by eye care professionals, schools, and community health programs.

Referral:
If astigmatism is detected during an eye exam, your eye care professional may refer you to an ophthalmologist or optometrist who specializes in the diagnosis and treatment of astigmatism. A referral may also be necessary if your astigmatism is severe or if you have other eye conditions that require more specialized treatment. Treatment for astigmatism may include eyeglasses, contact lenses, or refractive surgery.

4. Presbyopia

Presbyopia is a common age-related eye condition that affects the ability to see objects up close. It typically begins to develop in people over the age of 40 as the lens in the eye becomes less flexible and less able to change shape to focus on near objects.



The **symptoms** of presbyopia include difficulty seeing small print or objects up close, eye strain or fatigue, headaches, and the need to hold reading material at arm's length to see it clearly. People with presbyopia may also experience blurred vision at normal reading distances and may find it difficult to focus on objects that are both near and far away.

Presbyopia can be **diagnosed** during a routine eye exam, which may include a visual acuity test, a refraction test to measure the eye's ability to focus, and an examination of the eye's internal structures.

Prevention of presbyopia is not currently known, but maintaining good eye health by eating a healthy diet, protecting your eyes from injury and excessive UV exposure, and having regular eye exams can help detect and manage the condition.

Treatment for presbyopia typically includes corrective lenses, such as reading glasses, bifocal or progressive lenses, or contact lenses that help correct the refractive error in the eye.

Education about presbyopia can help individuals understand the condition, its symptoms, and the importance of regular eye exams.

Referral to an ophthalmologist or optometrist may be necessary for more specialized treatment or monitoring of the condition.

❖ **Squint**

Squints can be identified by wandering eyes and an inability to focus the eyes simultaneously. Any individual with a squint should be referred to. Referral to an ophthalmologist or optometrist may be necessary for more specialized treatment or monitoring of the condition.

❖ Conjunctivitis

Conjunctivitis, also known as pink eye, is a common eye condition that is characterized by inflammation or infection of the conjunctiva, the thin, clear tissue that lines the inside of the eyelid and covers the white part of the eye.

The **symptoms** of conjunctivitis can vary depending on the underlying cause, but commonly include redness or swelling of the eye or eyelid, discharge or crusting of the eyelashes, itching or burning of the eye, and sensitivity to light. Conjunctivitis can be caused by a viral or bacterial infection, an allergic reaction, or exposure to irritants such as chemicals or dust.

Diagnosis of conjunctivitis typically involves a comprehensive eye exam, including a review of medical history and symptoms, examination of the eyelids and surrounding tissue, and laboratory testing or cultures to determine the underlying cause of the condition.

Prevention of conjunctivitis can include maintaining good eye hygiene, washing hands regularly, avoiding sharing towels or personal items with others, and avoiding exposure to irritants or allergens.

To **treat** conjunctivitis it is necessary to: wash eyes daily; use antibiotic; use tetracycline eye ointment three times daily for 7 days. If there is no improvement in 3 days, the person should be referred to an ophthalmology.

Education about conjunctivitis can help individuals understand the condition, its causes, and the importance of good eye hygiene and avoiding contact with others when experiencing symptoms. Referral to an ophthalmologist or optometrist may be necessary for more specialized treatment or monitoring of the condition.

★ **Bacterial conjunctivitis:** this is an eye infection caused by bacteria that affect the conjunctiva, the thin membrane that covers the white part of the eye and the inside of the eyelids. This type of conjunctivitis is highly contagious and is commonly spread through direct contact with contaminated hands or surfaces.

Symptoms:

- Redness and swelling of the conjunctiva
- Eye discharge, which can be thick and yellow or green in color
- Itchy or gritty sensation in the eye
- Sensitivity to light
- Blurred vision
- Crusting of the eyelids or lashes, especially upon waking

Diagnosis:

A healthcare professional can diagnose bacterial conjunctivitis by examining the eye and assessing the symptoms. They may also perform tests to identify the type of bacteria causing the infection.

Prevention:

Good hygiene practices, such as frequent hand washing and avoiding touching the eyes, can help prevent the spread of bacterial conjunctivitis. Avoid sharing towels, eye makeup, or contact lenses with others.

Treatment:

Antibiotic eye drops or ointment are typically prescribed to treat bacterial conjunctivitis.

Warm compresses and gentle eyelid cleaning can also help alleviate symptoms and promote healing.

Education:

Patients should be educated about the importance of completing the full course of antibiotic treatment and avoiding contact with others while contagious.

Good hygiene practices should also be reinforced to prevent the spread of the infection.

Referral:

Patients with severe or recurrent bacterial conjunctivitis may be referred to an eye specialist for further evaluation and treatment.

★ **Viral conjunctivitis** is an eye infection caused by a virus that affects the conjunctiva, the thin membrane that covers the white part of the eye and the inside of the eyelids. This type of conjunctivitis is highly contagious and can be spread through direct contact with contaminated hands or surfaces.

Symptoms of viral conjunctivitis can include:

- Redness and swelling of the conjunctiva
- Eye discharge, which can be watery or mucous-like
- Itchy or burning sensation in the eye
- Sensitivity to light
- Blurred vision

Diagnosis:

A healthcare professional can diagnose viral conjunctivitis by examining the eye and assessing the symptoms. They may also perform tests to confirm the presence of a viral infection.

Prevention:

Good hygiene practices, such as frequent hand washing and avoiding touching the eyes, can help prevent the spread of viral conjunctivitis.
Avoid sharing towels, eye makeup, or contact lenses with others.

Treatment:

There is no specific treatment for viral conjunctivitis, and the infection typically resolves on its own within 1-2 weeks.
Symptomatic relief can be provided through the use of artificial tears, cold compresses, and other supportive measures.

Education:

Patients should be educated about the importance of good hygiene practices to prevent the spread of viral conjunctivitis. Patients should be advised to avoid touching their eyes, and to avoid sharing towels or personal items with others to reduce the risk of transmission.

Referral:

Patients with severe or recurrent viral conjunctivitis may be referred to an eye specialist for further evaluation and treatment.
Overall, viral conjunctivitis is a common and self-limited eye infection that typically resolves on its own within a few weeks. Good hygiene practices and avoidance of shared personal items can help prevent the spread of infection. Symptomatic relief can be provided with supportive measures, and severe or recurrent cases may require referral to an eye specialist for further evaluation and management.

★ **Conjunctivitis of the newborn**, also known as neonatal conjunctivitis or ophthalmia neonatorum, is an inflammation of the conjunctiva (the clear membrane that lines the inside of the eyelids and covers the white part of the eye) in infants under 28 days of age. It can be caused by a variety of factors, including infections, irritants, and blocked tear ducts.

Symptoms:

- Excessive tearing
- Redness or swelling of the conjunctiva
- Discharge from the eyes (thick or thin, clear or yellowish, with or without odor)
- Eyelids sticking together
- Sensitivity to light

Diagnosis:

A doctor can diagnose conjunctivitis of the newborn by examining the infant's eyes and looking for signs of inflammation or infection.If an infection is suspected, a culture may be taken from the eye discharge to determine the cause.

Prevention:

The most effective way to prevent conjunctivitis of the newborn is to administer prophylactic eye drops or ointment to all newborns at birth.
This treatment is recommended by the World Health Organization (WHO) and involves applying erythromycin or another antibiotic ointment to the infant's eyes within the first hour of birth.

Treatment:

The treatment for conjunctivitis of the newborn depends on the cause.
If the condition is caused by a bacterial infection, antibiotic eye drops or ointment may be prescribed. Viral infections may be treated with antiviral medications, while irritants may require flushing the eye with saline solution.

Education:

Parents should be educated on the importance of eye care for newborns and the signs and symptoms of conjunctivitis of the newborn. They should also be informed about the benefits of prophylactic eye treatment and what to do if they notice any symptoms of conjunctivitis in their infant.

Referral:

Referral to a pediatric ophthalmologist or other eye specialist may be necessary for diagnosis, treatment, and ongoing management of conjunctivitis of the newborn.

❖ **Dry eye**
, is a common eye condition that occurs when there is insufficient moisture in the eye. This can happen when the eye does not produce enough tears, or when the tears evaporate too quickly.

Symptoms:

- Dryness or gritty sensation in the eye
- Burning or stinging sensation in the eye
- Redness or irritation of the eye
- Blurred vision
- Sensitivity to light
- Excessive tearing (in some cases)

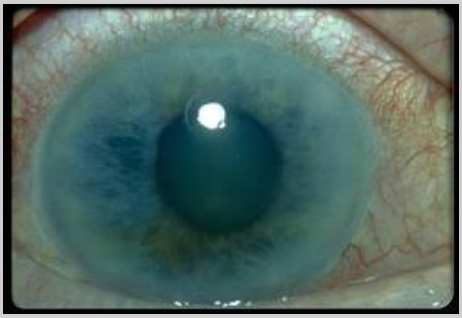
Diagnosis:
A healthcare professional can diagnose dry eye by examining the eye and assessing the symptoms. They may also perform tests to measure the quantity and quality of tears.
Prevention:
Avoiding environmental factors that can contribute to dry eye, such as exposure to wind or smoke, can help prevent the condition.
Taking frequent breaks when using digital devices can also help prevent dry eye.

Treatment:
Treatment for dry eye may include the use of artificial tears, which are over-the-counter eye drops that can help lubricate the eye.
In some cases, prescription medications, such as anti-inflammatory drugs or drugs that stimulate tear production, may be recommended. In severe cases, punctual plugs may be inserted into the tear ducts to help retain tears in the eye.

Education:
Patients should be educated about the importance of maintaining good eye hygiene and avoiding environmental factors that can contribute to dry eye.
Patients should also be advised to use artificial tears as directed and to avoid rubbing their eyes, which can exacerbate symptoms.

Referral:
Patients with severe or persistent dry eye may be referred to an eye specialist for further evaluation and treatment.
Overall, dry eye is a common eye condition that can be effectively managed with the use of artificial tears and other treatments. Practicing good eye hygiene and avoiding environmental factors that can contribute to dry eye can help prevent the condition from occurring or worsening.

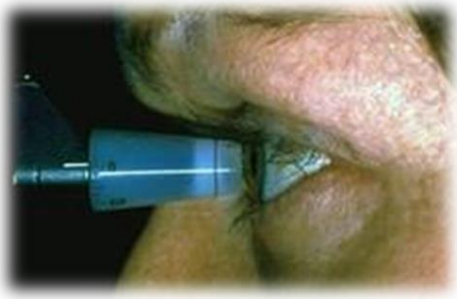
❖ Glaucoma



Glaucoma is a group of eye conditions that damage the optic nerve, which is responsible for transmitting visual information from the eye to the brain. This damage can cause vision loss or blindness if left untreated. There are several types of glaucoma, but the most common type is called primary open-angle glaucoma. In this type of glaucoma, the drainage channels in the eye become clogged, leading to an increase in intraocular pressure (IOP). This increase in pressure can damage the optic nerve over time and lead to vision loss.

Symptoms: Symptoms of glaucoma often develop slowly over time and may not be noticeable until significant vision loss has occurred. Some signs of glaucoma may include:

- Blurred vision
- Halos around lights
- Loss of peripheral vision
- Difficulty adjusting to low light conditions
- Eye pain



Diagnosis:

- Comprehensive eye exam, including visual acuity test,

Prevention:

- Regular eye exams, especially for individuals over 40 and those with a family history of glaucoma

- Maintaining a healthy lifestyle, including exercise and a balanced diet
- Wearing eye protection when participating in certain activities (e.g. sports, DIY projects)

Education:

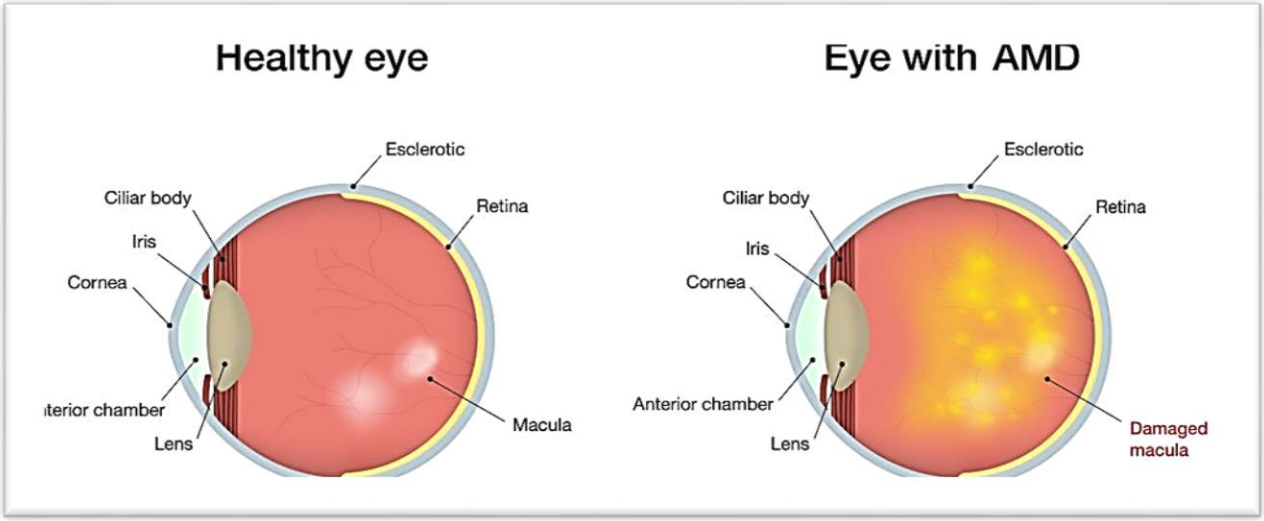
- Educate patients about the importance of regular eye exams and monitoring of intraocular pressure
- Educate patients about the different types of glaucoma and their specific treatment options
- Provide information on lifestyle modifications that may help prevent or manage glaucoma

Referral:

- Refer patients to an ophthalmologist for further evaluation and treatment

❖ Age-related macular degeneration (AMD)

Age-related macular degeneration (AMD) is a chronic eye disease that affects the macula, which is the central part of the retina responsible for sharp, detailed vision. AMD is most commonly seen in people over the age of 50, and it is the leading cause of vision loss in older adults.
There are two types of AMD: dry and wet. Dry AMD is the more common type, accounting for about 80% of cases. It is characterized by the thinning and breakdown of the macular tissue, leading to a gradual loss of central vision. Wet Age-related macular degeneration (AMD), on the other hand, occurs when abnormal blood vessels grow under the macula and leak blood and fluid, causing rapid and severe vision loss.



Symptoms of Age-related macular degeneration (AMD) may include blurred or distorted vision, difficulty reading or recognizing faces, and the appearance of a dark or empty area in the center of the visual field.

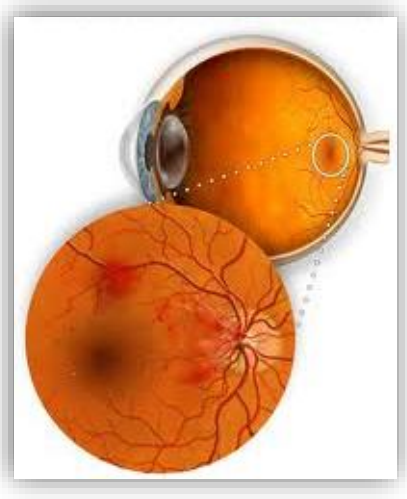
Diagnosis of Age-related macular degeneration (AMD) typically involves a comprehensive eye exam, including a visual acuity test,
There is currently no cure for Age-related macular degeneration (AMD), but early detection and treatment can help slow its progression and preserve vision. Treatment options may include medications injected into the eye to reduce inflammation and abnormal blood vessel growth, photodynamic therapy, and laser surgery.

Prevention of Age-related macular degeneration (AMD) may include maintaining a healthy lifestyle, such as exercising regularly, eating a balanced diet rich in fruits and vegetables, avoiding smoking, and protecting the eyes from UV radiation.

Education for individuals with Age-related macular degeneration (AMD) may involve learning strategies to maximize remaining vision, such as using magnifying devices or adaptive technologies. Referral to a low vision specialist or rehabilitation services may also be beneficial to help individuals adapt to vision loss and maintain independence.

- **Diabetic retinopathy**

Diabetic retinopathy is a complication of diabetes that affects the blood vessels in the retina, which is the light-sensitive tissue at the back of the eye. High levels of blood sugar associated with diabetes can damage the blood vessels in the retina, leading to leakage, swelling, and abnormal growth.
There are two main types of diabetic retinopathy: non-proliferative and proliferative. Non-proliferative diabetic retinopathy (NPDR) is the early stage of the disease, where small areas of swelling and leaking blood vessels occur in the retina. Proliferative diabetic retinopathy (PDR) is the more advanced stage, where new abnormal blood vessels grow on the surface of the retina, which can lead to bleeding, scarring, and ultimately, vision loss.



Symptoms of diabetic retinopathy may include blurry or distorted vision, seeing floaters or dark spots, and difficulty seeing at night.

Diagnosis of diabetic retinopathy typically involves a comprehensive eye exam, including visual acuity tests in PHC , and referral to ophthalmology to dilated eye exams, and imaging tests such as optical coherence tomography (OCT) or fluorescein angiography.

Prevention of diabetic retinopathy includes managing blood sugar, blood pressure, and cholesterol levels through lifestyle changes, medication, and regular monitoring by a healthcare provider. People with diabetes should have an annual dilated eye exam to detect any early signs of diabetic retinopathy.

Referral to Treatment of diabetic retinopathy may include laser surgery to stop the growth of abnormal blood vessels, injections of medication into the eye to reduce inflammation and blood vessel growth, or vitrectomy surgery to remove blood and scar tissue from the eye.

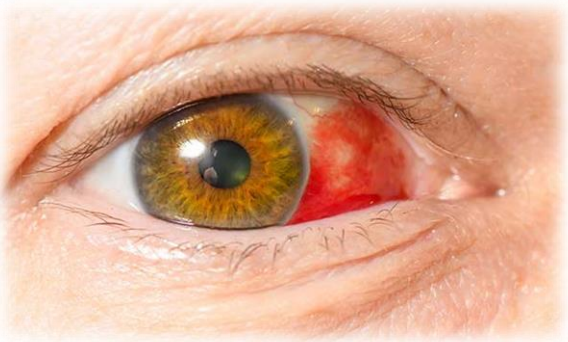
Education for individuals with diabetic retinopathy may include strategies to manage blood sugar levels, such as healthy eating and regular exercise, as well as proper eye care and regular monitoring of blood sugar and blood pressure levels.

- ❖ **Subconjunctival hemorrhage**

Subconjunctival hemorrhage (SCH) is a common eye condition that occurs when a small blood vessel breaks open and bleeds into the space between the conjunctiva (the clear membrane that covers the white part of the eye) and the sclera (the white part of the eye). SCH is usually harmless and does not affect vision, but it can be concerning to those who experience it.

Symptoms:

- A bright red patch on the white of the eye
- No pain or discomfort
- No discharge or tearing



Diagnosis:

Subconjunctival hemorrhage (SCH) is usually diagnosed by a healthcare professional through a visual examination of the eye.

Prevention:

There is no specific way to prevent Subconjunctival hemorrhage (SCH), but avoiding eye trauma and protecting the eyes during activities that may cause injury can help reduce the risk of developing SCH.

Treatment:
Subconjunctival hemorrhage (SCH) typically resolves on its own within 1-2 weeks and does not require treatment.Cold compresses applied to the eye may help reduce swelling and discomfort.In some cases, eye drops may be prescribed to reduce inflammation.

Education:
Patients should be educated that Subconjunctival hemorrhage (SCH) is a common and usually harmless eye condition.Patients should be advised to contact their healthcare provider if they experience any pain or vision changes.

Referral:
Referral to an eye specialist is not typically required for Subconjunctival hemorrhage (SCH), but may be recommended in rare cases where the SCH is severe or recurrent.

- **Blepharitis**

Blepharitis is a common and chronic condition that affects the eyelids, causing inflammation and irritation.
It can affect people of all ages, but is more common in older adults. Blepharitis is typically caused by a bacterial or fungal infection or by an overgrowth of normal skin bacteria. It can also be associated with other skin conditions, such as rosacea or seborrheic dermatitis.

Symptoms:
- Itching or burning sensation in the eyes
- Redness or swelling of the eyelids
- Crusty or greasy flakes on the eyelashes
- Sensation of a foreign body or gritty feeling in the eyes
- Excessive tearing or dry eyes
- Blurred vision

Diagnosis:
A healthcare professional can diagnose blepharitis through a visual examination of the eyes and eyelids.

Prevention:
Proper eyelid hygiene, including washing the eyelids daily and avoiding the use of makeup and other products that can irritate the eyes, can help prevent blepharitis. Managing underlying conditions such as rosacea or seborrheic dermatitis may also help prevent blepharitis.

Treatment:
Treatment for blepharitis typically involves a combination of good eyelid hygiene, medication, and lifestyle changes. Warm compresses and eyelid scrubs can help reduce inflammation and remove debris from the eyelids.
Antibiotic or antifungal eye drops or ointments may be prescribed to treat the underlying infection. Artificial tears or lubricating eye drops may be recommended to relieve dryness and irritation.

Education:
Patients should be educated on proper eyelid hygiene, including washing the eyelids daily and avoiding products that can irritate the eyes.
Patients should also be advised to avoid rubbing or touching their eyes, as this can worsen the symptoms of blepharitis.

Referral:
Patients with severe or recurrent blepharitis may be referred to an eye specialist for further evaluation and treatment.

- **Stye(Hordeolum)**

A stye, also known as hordeolum, is a common and usually harmless eye condition that results from an infection of the oil glands in the eyelids. It typically appears as a red, painful bump on the edge of the eyelid and can be caused by bacteria, such as Staphylococcus aureus.

Symptoms:

- A painful red bump on the edge of the eyelid
- Swelling of the eyelid
- Tenderness or sensitivity to touch
- Crusting along the eyelid margin
- Blurred vision (if the stye is large)

Diagnosis:

A healthcare professional can diagnose a stye through a visual examination of the eye and eyelid.

Prevention:

Good hygiene practices, such as washing the hands and face regularly, can help prevent the spread of bacteria that cause styes.

Avoiding sharing of personal items such as towels, washcloths, and eye makeup with others can also help prevent the spread of bacteria.

Treatment:

Treatment for a stye typically involves warm compresses and proper eyelid hygiene. Applying a warm compress for 10-15 minutes several times a day can help reduce swelling and promote drainage of the stye.

Proper eyelid hygiene, including washing the eyelids with a gentle cleanser, may help prevent the formation of new styes. In some cases, antibiotic eye drops or ointments may be prescribed to help clear the infection.

Education:

Patients should be educated on proper hygiene practices to prevent the spread of bacteria that cause styes. Patients should be advised to avoid squeezing or popping the stye, as this can lead to further infection.

Referral:

Referral to an eye specialist is not typically required for a stye, but may be recommended in rare cases where the stye is large or does not respond to conservative treatment.

❖ Chalazion(meibomian gland lymphogranuloma)

A chalazion is a benign, painless bump that develops on the eyelid, typically caused by a blockage in the Meibomian gland, which produces the oily part of tears. It is also known as a Meibomian gland lymphogranuloma.

Symptoms:

- A painless bump or swelling on the eyelid
- Redness and inflammation of the eyelid
- Tenderness or sensitivity to touch
- Blurred vision (if the chalazion is large)

Diagnosis:
A healthcare professional can diagnose a chalazion through a visual examination of the eye and eyelid.

Prevention:
Good hygiene practices, such as washing the hands and face regularly, can help prevent the spread of bacteria that cause chalazia.
Avoiding sharing of personal items such as towels, washcloths, and eye makeup with others can also help prevent the spread of bacteria.

Treatment:
Treatment for a chalazion typically involves warm compresses and proper eyelid hygiene.
Applying a warm compress for 10-15 minutes several times a day can help reduce swelling and promote drainage of the chalazion.
Proper eyelid hygiene, including washing the eyelids with a gentle cleanser, may help prevent the formation of new chalazia.
In some cases, steroid injections or surgical removal of the chalazion may be necessary if conservative treatments are not effective.

Education:
Patients should be educated on proper hygiene practices to prevent the spread of bacteria that cause chalazia. Patients should be advised to avoid squeezing or popping the chalazion, as this can lead to further infection.

Referral:
Referral to an eye specialist is not typically required for a chalazion, but may be recommended in rare cases where the chalazion is large or does not respond to conservative treatment.

❖ Nasolacrimal Duct Obstruction with infection

Nasolacrimal duct obstruction (NLDO) is a condition where the tear drainage system is blocked, resulting in excessive tearing and/or discharge from the eyes. When NLDO is complicated by infection, it can lead to a range of symptoms and potential complications.

Symptoms:

- Excessive tearing
- Discharge from the eye (may be clear, yellow, or green)
- Redness or swelling around the eye
- Pain or tenderness around the eye or nose
- Blurred vision or sensitivity to light

Diagnosis:

A healthcare professional can diagnose Nasolacrimal duct obstruction NLDO with a physical examination of the eye and tear duct system.

In cases of infection, a swab of the discharge may be taken to identify the specific bacteria or virus causing the infection.

Prevention:

There is no specific way to prevent Nasolacrimal duct obstruction NLDO, but good hygiene practices such as washing the hands regularly and avoiding touching the eyes can help reduce the risk of infection.

Treatment:

Treatment for Nasolacrimal duct obstruction NLDO with infection typically involves antibiotics to clear the infection. Warm compresses and gentle massage of the tear ducts may also help improve drainage. In severe or chronic cases, surgery may be necessary to remove the blockage and restore proper tear drainage.

Education:

Patients should be educated on proper hygiene practices to reduce the risk of infection.

Patients should be advised to avoid touching or rubbing their eyes, which can exacerbate the condition.

Referral:
Referral to an eye specialist or ophthalmologist may be necessary for severe or chronic cases of Nasolacrimal duct obstruction NLDO, or in cases where surgery is required.

❖ Corneal abrasion and foreign body

Corneal abrasion and foreign body are common eye injuries that can be caused by various factors such as trauma, foreign objects, or improper use of contact lenses.

Symptoms:
- Pain or discomfort in the eye
- Redness
- Tearing or watering of the eye
- Sensitivity to light
- Blurred vision
- Feeling like there is something in the eye

Diagnosis:
A healthcare professional can diagnose corneal abrasion and foreign body through a comprehensive eye exam, which may include the use of a slit lamp microscope to examine the eye closely.

Prevention:
Wearing eye protection when engaging in activities that could cause eye injury, such as sports or working with power tools.
Proper use and care of contact lenses, including avoiding wearing them for too long or sleeping in them.

Treatment:
Treatment for corneal abrasion and foreign body typically involves removing the foreign object or debris from the eye.
In some cases, antibiotics or medicated eye drops may be prescribed to prevent infection or promote healing.
Pain relievers may also be recommended to manage discomfort.

Education:
Patients should be educated on proper eye hygiene and care to prevent future injury or infection.
Patients should also be advised to seek medical attention if symptoms do not improve or if there is a worsening of symptoms.

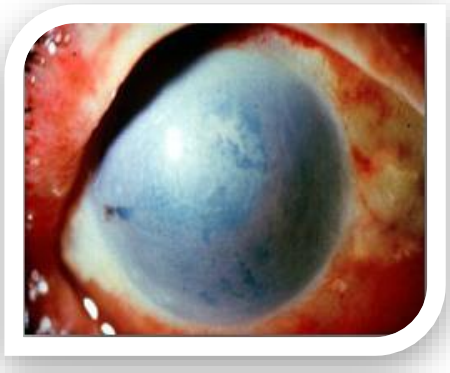
Referral:
Referral to an eye specialist or ophthalmologist may be necessary for severe or complicated cases of corneal abrasion or foreign body, or in cases where there is a risk of vision loss.

- **Chemical burn of eye**

A chemical burn of the eye is a serious eye injury that can result from exposure to a chemical substance that can cause damage to the eye's surface or deeper structures. The severity of the injury depends on the type and concentration of the chemical and the duration of exposure.

Symptoms:

- Eye pain
- Redness
- Blurred vision
- Tearing
- Sensitivity to light
- Swelling
- Eye discharge
- Loss of vision



Diagnosis:
A healthcare professional can diagnose a chemical burn of the eye through a comprehensive eye exam, which may include the use of a slit lamp microscope to examine the eye closely.
A sample of the discharge from the eye may also be taken for laboratory testing to determine the type of chemical involved.

Prevention:

- Proper handling and storage of chemical substances.
- Wearing protective eyewear when handling chemicals
- Knowing the location of emergency eyewash stations

Treatment:

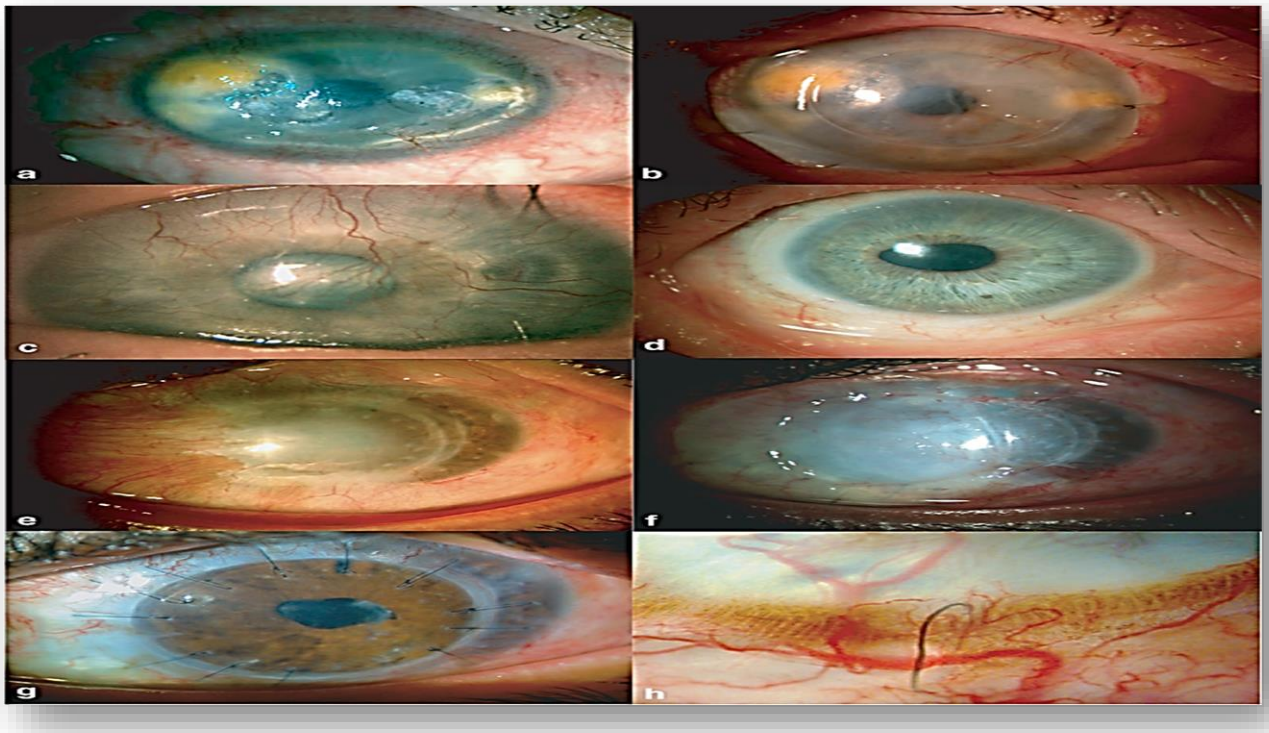
Treatment for a chemical burn of the eye typically involves flushing the eye with water or saline solution to remove the chemical substance.

Pain relief medication and antibiotics may also be prescribed to prevent infection and reduce inflammation. In severe cases, surgery may be required to repair any damage to the eye's surface or deeper structures.

Education:

Patients should be educated on proper handling and storage of chemical substances to prevent future accidents and injuries.

Patients should also be advised to seek medical attention immediately if they come into contact with a chemical substance and experience symptoms of a chemical burn of the eye.



Referral:

Referral to an eye specialist or ophthalmologist is necessary for diagnosis and treatment of a chemical burn of the eye, particularly in cases of severe or complicated injuries that may require surgical intervention.

❖ Scleritis

Scleritis is a rare and serious inflammatory condition that affects the sclera, the tough, white outer layer of the eye. It is typically characterized by severe pain and redness in the eye, and can lead to vision loss if left untreated.

Symptoms:

- Severe eye pain
- Redness of the eye
- Blurred vision or loss of vision
- Sensitivity to light
- Tearing
- Headache
- Nodules or raised areas on the surface of the eye

Diagnosis:

A healthcare professional can diagnose scleritis through a comprehensive eye exam, which may include the use of a slit lamp microscope to examine the eye closely.

Blood tests and other diagnostic tests may be conducted to rule out underlying systemic conditions that may be contributing to the inflammation.

Prevention:

There is no known way to prevent scleritis.

Treatment:

Treatment for scleritis typically involves the use of systemic anti-inflammatory medications such as corticosteroids or immunosuppressive agents to reduce inflammation and relieve symptoms. In some cases, surgical intervention may be necessary to treat complications such as scleral thinning or perforation.

Treatment may need to be continued for several weeks or months, depending on the severity of the condition.

Education:

Patients should be educated on the importance of proper eye hygiene and care to prevent further irritation or damage to the eye. Patients should also be advised to seek medical attention if they experience worsening symptoms or if they develop additional symptoms such as fever or joint pain.

Referral:
Referral to an eye specialist or ophthalmologist is necessary for diagnosis and treatment of scleritis, as it is a serious condition that requires specialized care.

❖ Iritis

Iritis, also known as anterior uveitis, is an inflammatory condition that affects the iris, which is the colored part of the eye. It is often characterized by redness, pain, and sensitivity to light.

Symptoms:

- Redness of the eye
- Pain or discomfort in the eye, often described as a dull ache
- Blurred vision
- Sensitivity to light
- Excessive tearing
- Small or irregularly shaped pupil
- Headache

Diagnosis:
A healthcare professional can diagnose iritis through a comprehensive eye exam, which may include the use of a slit lamp microscope to examine the eye closely. Blood tests and other diagnostic tests may be conducted to rule out underlying systemic conditions that may be contributing to the inflammation.

Prevention:
There is no known way to prevent iritis.

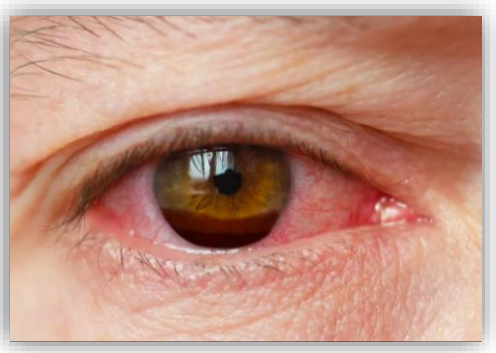
Treatment:
Treatment for iritis typically involves the use of anti-inflammatory medications such as corticosteroids or nonsteroidal anti-inflammatory drugs (NSAIDs) to reduce inflammation and relieve symptoms.Dilating eye drops may also be prescribed to reduce pain and prevent complications such as posterior synechiae, which occurs when the iris adheres to the lens of the eye. Treatment may need to be continued for several weeks or months, depending on the severity of the condition.

Education:
Patients should be educated on the importance of proper eye hygiene and care to prevent further irritation or damage to the eye.

Patients should also be advised to seek medical attention if they experience worsening symptoms or if they develop additional symptoms such as fever or joint pain.

Referral:
Referral to an eye specialist or ophthalmologist is necessary for diagnosis and treatment of iritis, as it is a serious condition that requires specialized care.

❖ Hyphema



Hyphema is a condition where blood accumulates in the front part of the eye, in the space between the cornea and iris (anterior chamber). It is usually caused by trauma to the eye, but can also be associated with certain medical conditions.

Symptoms:

- Visible blood in the anterior chamber of the eye
- Eye pain
- Blurred or distorted vision
- Sensitivity to light
- Nausea or vomiting

Diagnosis:

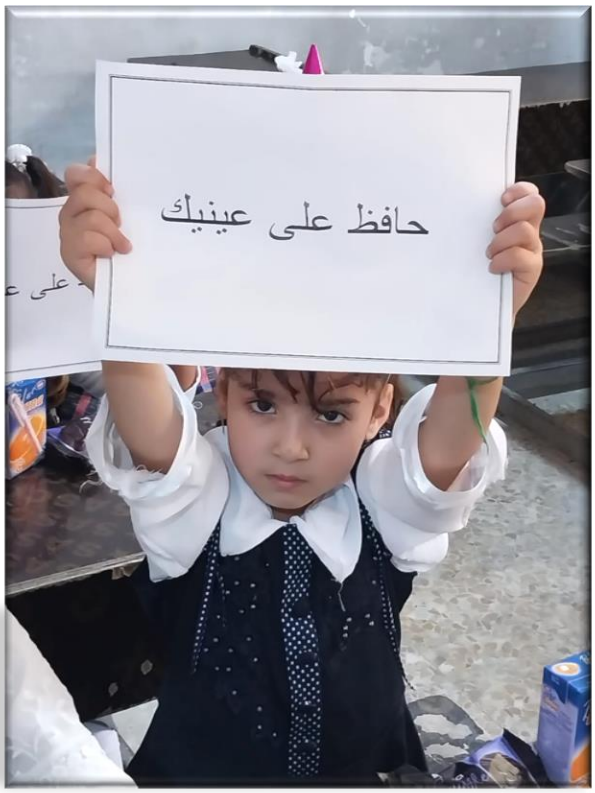
A healthcare professional can diagnose hyphema through a comprehensive eye exam, which may include the use of a slit lamp microscope to examine the eye closely.
Imaging tests such as ultrasound or CT scan may be ordered to evaluate the extent of the injury or to rule out other underlying conditions.

Prevention:
Hyphema can often be prevented by wearing protective eyewear during activities that may cause eye injury, such as sports or certain work activities.

Treatment:
Treatment for hyphema depends on the severity of the condition and underlying cause, and may include bed rest, eye patching, and use of topical medications to control pain and inflammation.
In severe cases, surgical intervention may be required to prevent further bleeding or to repair damage to the eye.

Education:
Patients should be educated on the importance of avoiding activities that may cause eye injury, and to seek medical attention immediately if they experience symptoms of hyphema or other eye injuries.

Referral:
Referral to an eye specialist or ophthalmologist is necessary for diagnosis and treatment of hyphema, as it is a serious condition that requires specialized care.



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