

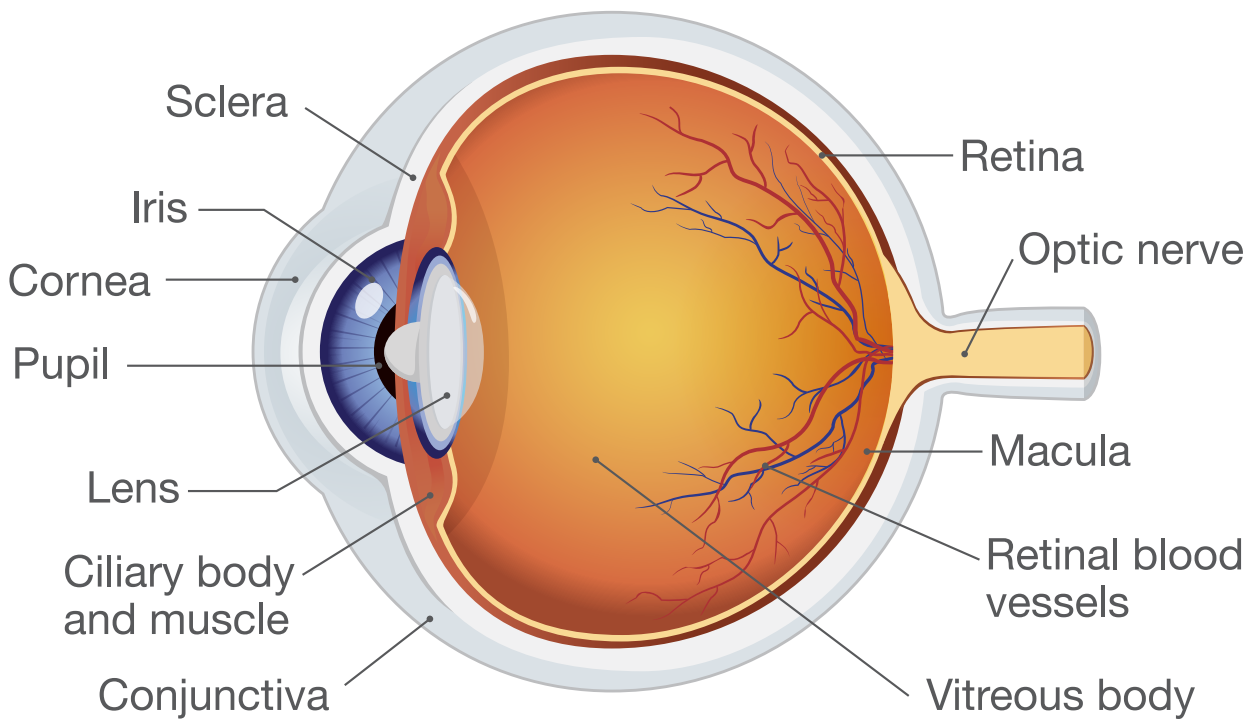
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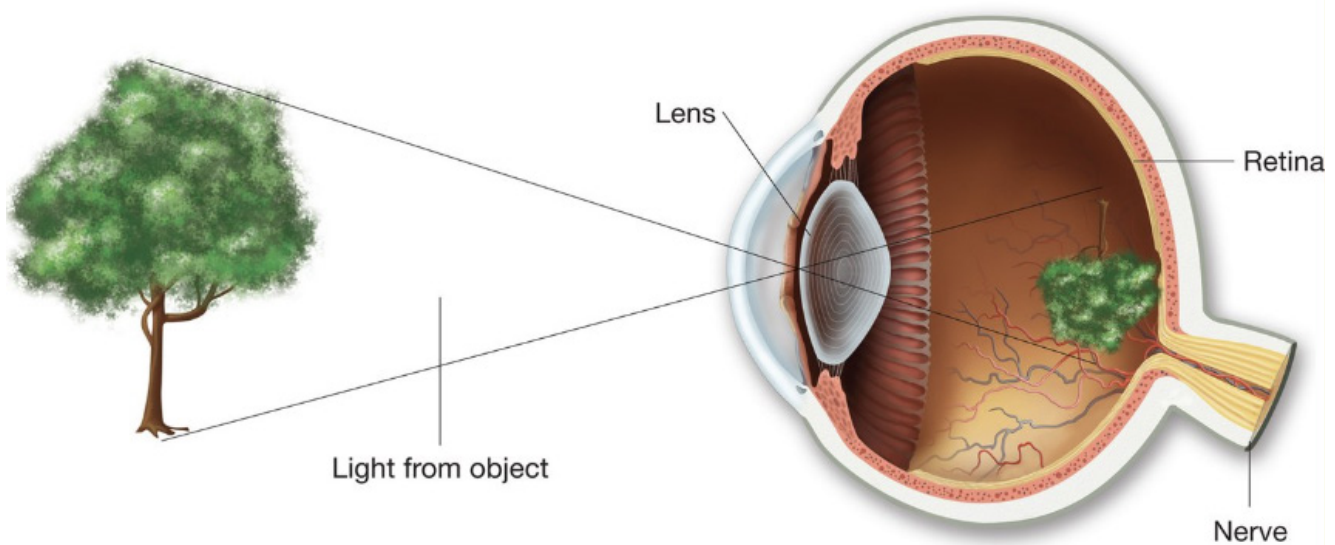


**UNDERSTANDING REFRACTIVE ERRORS
OF EYE AND LASIK**

Human Eye Anatomy



How are images formed in the eye?



- 1 Light from the object enters the eye through the cornea.
- 2 The cornea and lens refract and focus the incoming light.
- 3 Focused light reaches the retina, containing photoreceptor cells.
- 4 Photoreceptors convert light into electrical signals transmitted via the optic nerve.
- 5 The brain processes these signals to create a visual perception.

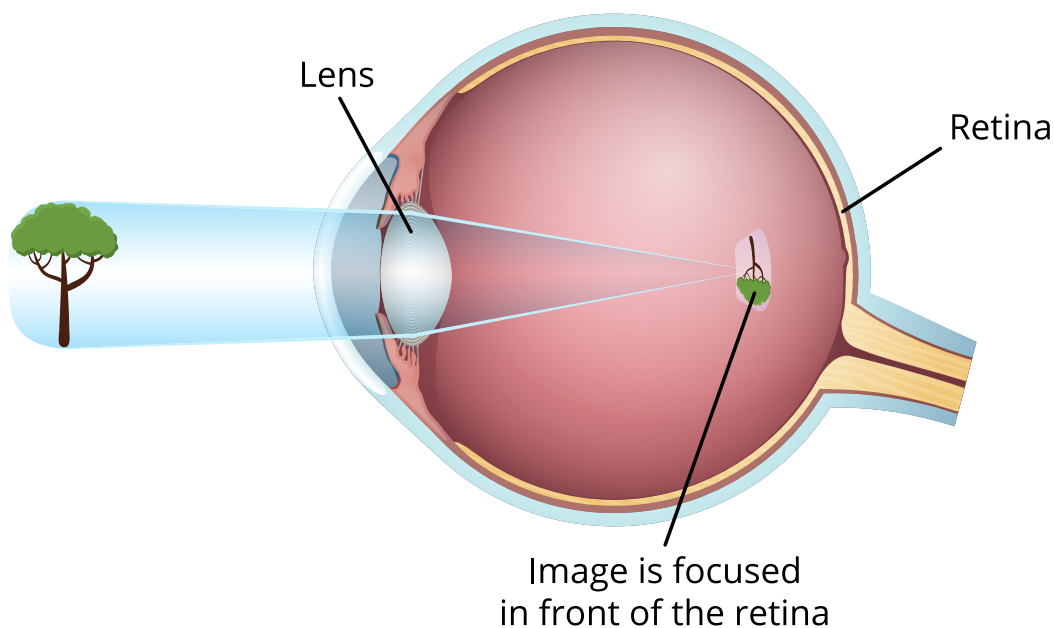


What are the refractive errors of the eye?

Refractive errors are common vision problems caused by the eye's inability to properly focus light on the retina. The main types of refractive errors include:

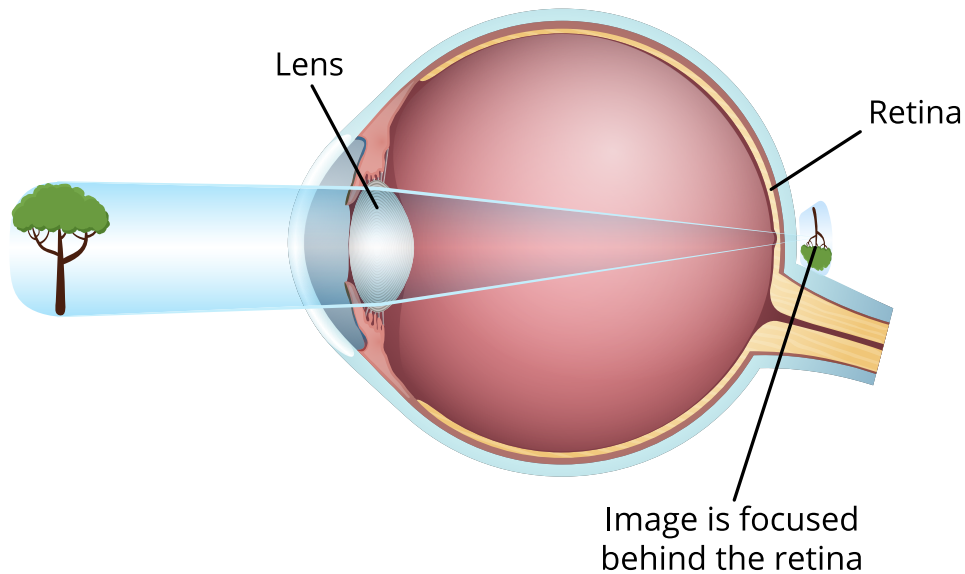
1 Myopia (Nearsightedness):

- Close objects appear clear, but distant objects are blurry.
- Light is focused in front of the retina instead of on it, often due to the eyeball being too long or the cornea having too much curvature.



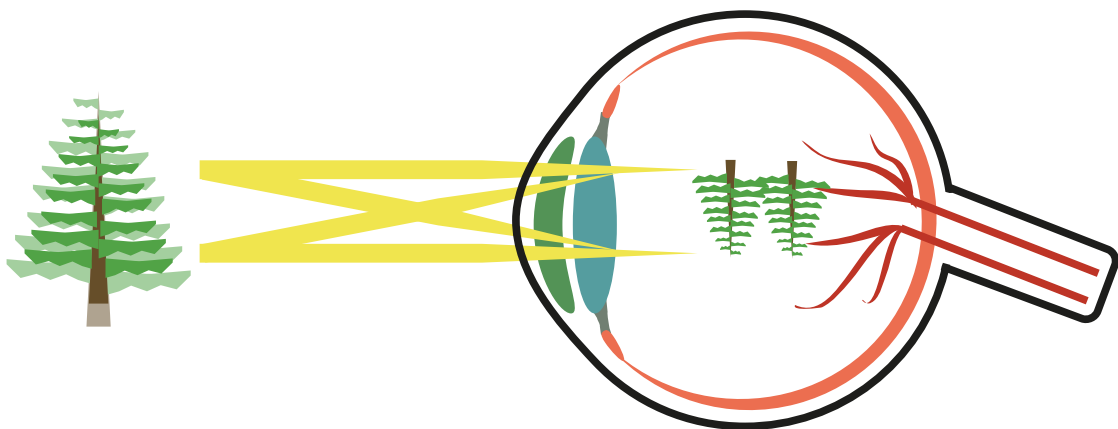
2 Hyperopia (Farsightedness):

- ▶ Distant objects may be seen more clearly than close ones.
- ▶ Light is focused behind the retina, often due to the eyeball being too short or the cornea having too little curvature.



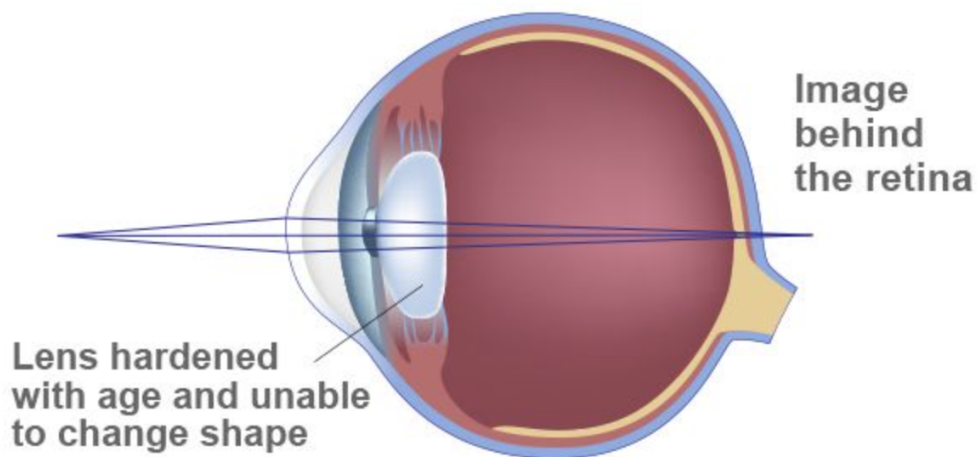
3 Astigmatism:

- ▶ Blurred or distorted vision at any distance.
- ▶ Irregular shape of the cornea or lens causes different focal points for vertical and horizontal light rays.



4 Presbyopia:

- ▶ Difficulty focusing on close objects, particularly as people age.
- ▶ It is caused by the natural aging process that leads to a loss of flexibility in the lens, making it harder to adjust focus for near vision.



Why not delay treatment for refractive errors of the eye?



With time vision progressively declines

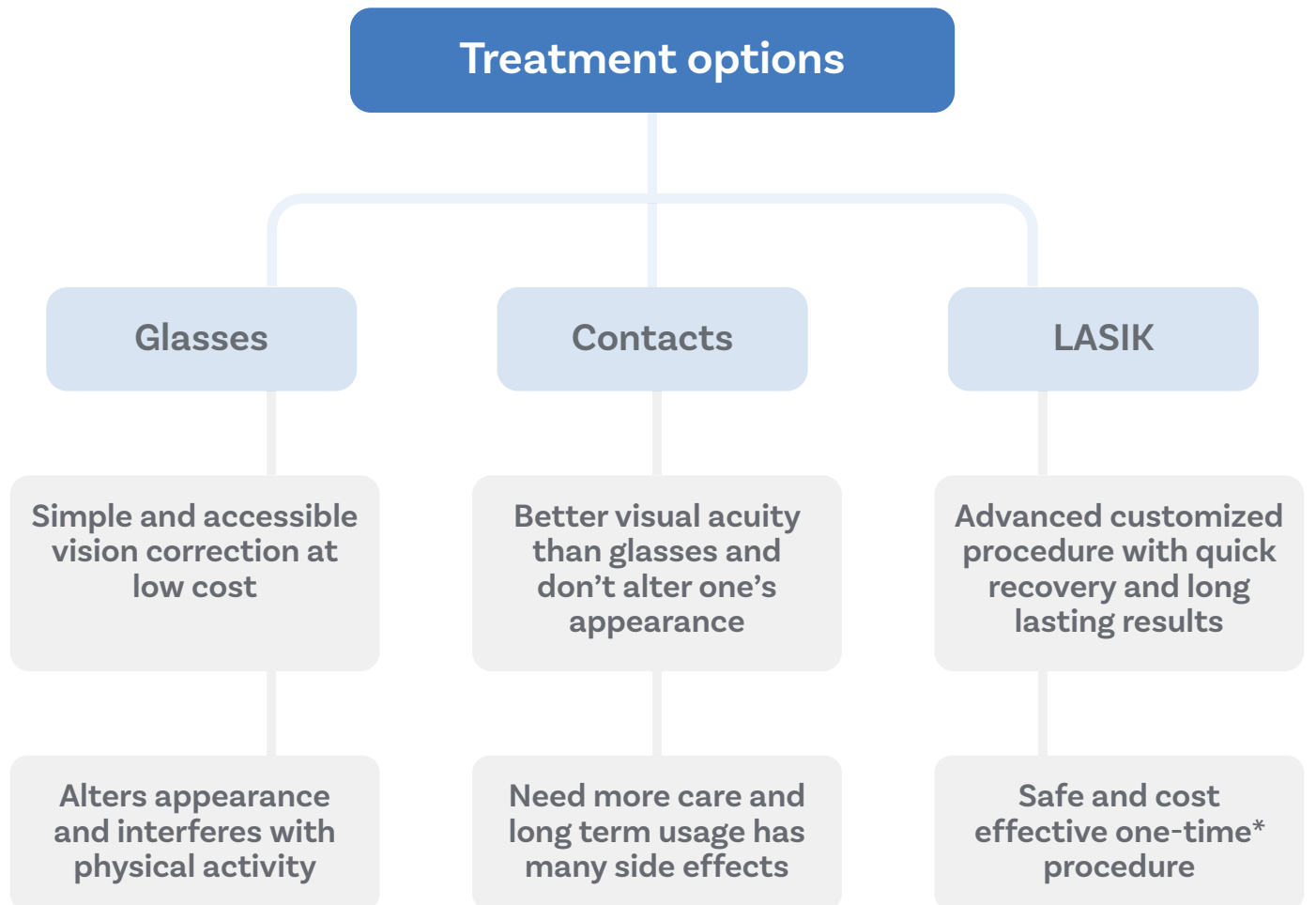


Impaired or decreased vision in one eye



Can also lead to permanent blindness

Treatment of Refractive Errors of Eye

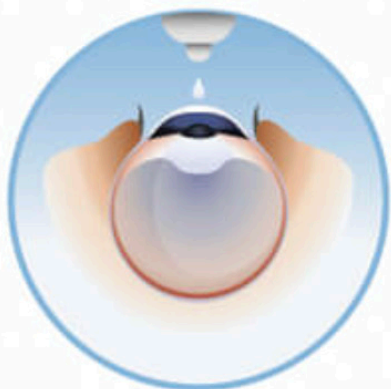


*in most cases

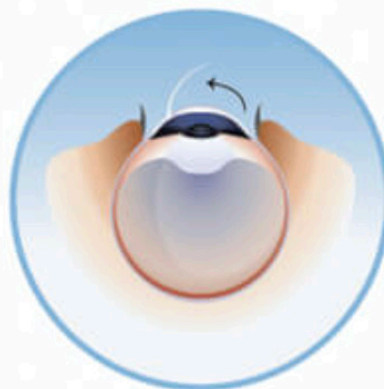
Following the LASIK procedure, people worldwide report extreme satisfaction with the results, making LASIK one of the most successful elective procedures.

What is LASIK?

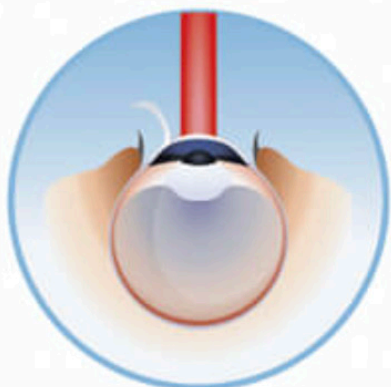
LASIK, or Laser-Assisted In Situ Keratomileusis, is a surgical procedure used to correct vision problems like nearsightedness, farsightedness, and astigmatism by reshaping the cornea with a laser. It's a popular option for those seeking reduced dependence on glasses or contact lenses.



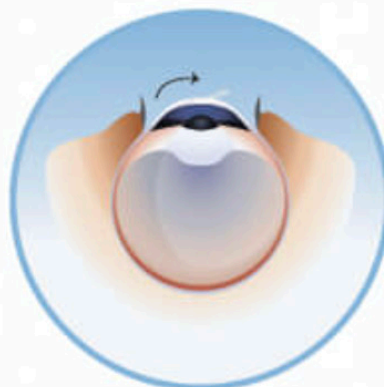
1 The eye is anesthetized with topical eye drops.



2 The surgeon creates a corneal flap on the outer layer of the eye. It is cut and flipped open like a cover of a book.

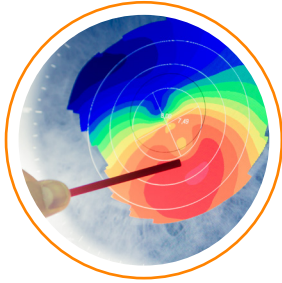


3 An excimer laser is used to reshape the cornea.



4 The Corneal flap is replaced like closing the cover of a book.

Pre-operative Investigations:



Corneal topography



Peripheral retinal evaluation



Cycloplegic refraction

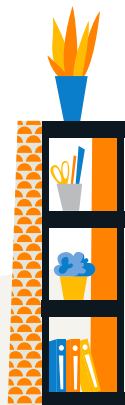
Recovery:



The eyes start recovering immediately after the LASIK surgery



Vision stabilizes within 24-48 hours.



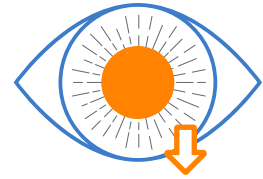
Advantages of LASIK



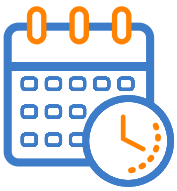
Improved vision



Painless and quick procedure



Lower incidence of postoperative pain



Long lasting results



Rapid recovery

Do's & Don'ts

DO'S

Keep the eyes closed as long as possible for first 24 hours

Blink more often to hydrate eyes

Use prescribed eye drops

Use protective eyewear

DON'TS

Touch or rub eyes after the surgery

Swim or play contact sports

Use cosmetic products for 2-4 weeks

Drive, until vision has completely improved

Frequently Asked Questions:

1 Is LASIK safe?

LASIK is considered safe for the majority of patients, but like any surgical procedure, it carries some risks. Most complications are rare and minor, such as dry eyes or glare, and serious complications are extremely rare.

2 Am I a candidate for LASIK?

Not everyone is a suitable candidate for LASIK. Your eye doctor will assess your overall eye health, prescription, and corneal thickness to determine if LASIK is right for you.

3 Does LASIK hurt?

The procedure itself is typically painless due to numbing eye drops, though some patients may experience slight pressure or discomfort. After LASIK, patients may experience temporary discomfort or dryness, but this usually resolves within a few days.

4 How long does LASIK take?

The actual laser treatment usually takes only a few minutes per eye. However, you should plan to spend a few hours at the clinic on the day of your procedure for pre-operative preparation and post-operative evaluation.

5 How soon will I see results after LASIK?

Many patients experience improved vision immediately after LASIK, with further improvement over the following days or weeks as the eyes continue to heal. Full visual stabilization may take several weeks.

6 Are there any side effects or risks associated with LASIK?

While rare, potential side effects and risks of LASIK include dry eyes, glare, halos, under corrections or overcorrections, and in extremely rare cases, vision loss. Your eye doctor will discuss these risks with you before the procedure.

7 How long does LASIK last?

LASIK provides long-lasting results for most patients. While age-related changes in vision or other factors may require additional vision correction later in life, many people enjoy improved vision without the need for glasses or contacts for many years after LASIK.

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