TWOP

World Keratoconus Day

2020

Source: American Optometry Association

World Keratoconus Day is an annual day of awareness held on November 10, to focus global attention on Keratoconus and ectatic corneal disorders

Definition & Prevalence

Definition:

• **Keratoconus** is a vision disorder that occurs when the normally round cornea becomes thin and irregular (cone) shape which prevents the light entering the eye from being focused correctly on the retina.

Prevalence:

- Prevalence of Keratoconus differs according
- to the geographical location around the world.
- It is generally **1 in 2000** people and **7%** have a family history of the disease.
- The estimated **annual incidence** of keratoconus ranges from **50 to 230 cases** per 100,000 population.





Sign & Symptoms

- Blurred or distorted vision.
- Increased sensitivity to light and glare,
 which can cause problems with night driving.
- Monocular diplopia.
- Sudden worsening or clouding of vision.
- A need for frequent changes in eyeglass prescriptions.
- Poor repeatability of subjective refraction.
- Munson's sign.







Causes & Risk factors

Causes:

- Although the most common type of keratoconus is sporadic, other studies show that the keratoconus has hereditary bases in some cases.
- One in 10 keratoconus sufferers has a close family relative with the disorder.
- Frequent eye rubbing, especially aggressive "knuckling" eye rubbing.

Risk Factors:

 Having a history of asthma, allergies, Ehlers Danlos syndrome, Down's syndrome, or Retinitis Pigmentosa Osteogenesis imperfecta.





Treatment

Lenses:

- Eyeglasses or soft contact lenses.
- Hard contact lenses.
- Piggyback lenses.
- Hybrid lenses.
- Scleral lenses.

Therapies:

Corneal collagen cross-linking.

Surgery:

- Penetrating keratoplasty.
- Deep anterior lamellar keratoplasty (DALK).









Possible Complications & Prevention

Complications:

- Acute corneal hydrops:
- Advanced keratoconus rarely may progress to acute corneal hydrops due to breaks in Descemet's membrane, leading to corneal oedema.
- Secondary corneal scarring.

Prevention:

- Avoid frequent rubbing of the eyes.
- Visit your Optometrist regularly for corneal curvature measurements and tests for irregular astigmatism.







