

DRY EYES



Itching

Redness

Burning

Foreign Body Sensation

Grittiness

Pain

Watery Eyes

What is Dry Eyes ?

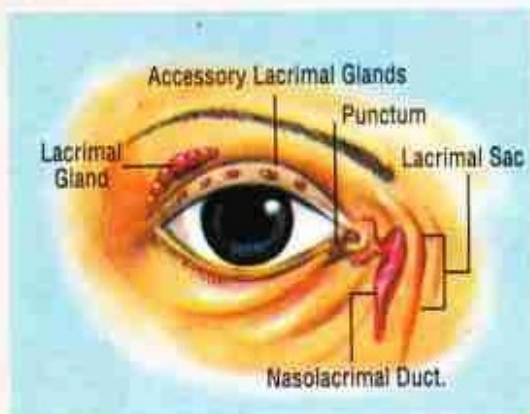
Dry Eyes also known as Kerato Conjunctivitis Sicca is the condition that occurs as a result of inadequate & ineffective wetting & lubrication of the eyes.

Dry Eye Syndrome is one of the most common problems treated by an Ophthalmologist. It is usually caused by a problem with the quality / quantity of the tear film that lubricates the eyes.

What is the physiology of Tear Film ?

In addition to moisten the corneal and conjunctival surface and providing lubrication for the eyelids, the tear film serves to provide nutrients and oxygen to the eye surface & removes foreign material from the eye. Tear Film inhibit bacterial growth and fill in epithelial surface irregularities to maintain a smooth optical surface. The pre corneal tear film consist of three layers.

a) Outer Lipid Layer b) Middle Aqueous Layer c) Inner Mucin Layer



What are the Symptoms of Dry Eyes ?

- Itching
- Burning & stinging sensation in the eye
- Irritation
- Redness
- Blurred vision that improves with blinking
- Excessive watering of the eye
- Increased discomfort after periods of reading, watching TV or working on a computer

What are the common causes of Dry Eye Syndrome ?

- Inadequate Blinking
- Environment
- Medications
- Infection
- Hormonal Changes
- Aging
- Contact Lens Usage
- Refractive Eye Surgery
- Vitamin A Deficiency

Who gets the Dry Eyes ?

Dry eyes can also be an isolated problem. Older people naturally have drier eyes,

because as we get older, our eyes produce on average 60 percent less lubrication. Some people lack a sufficient amount of tears, or their tears might have the wrong composition. In addition, a problem with the eyelid can prevent the tears from distributing over the eyes properly.

Dry eyes are mostly a health problem for women and seems to be a result of fluctuations in hormonal levels, particularly estrogen and androgens. Pregnant women, women who use birth control pills and post-menopausal women on hormone replacement therapy frequently report dry eyes.

Long term contact lens use can also contribute to dry eyes, because, over time contact lenses can reduce corneal sensitivity. The less sensitive the cornea, the fewer tears you will have.

Tobacco smoke, environmental allergens, air conditioning, wind and many medications (antihistamines, codeine, decongestants, diuretics, morphine, oral contraceptives and even eye drops) may also trigger dry eyes.

If left untreated, will dry eye harm the vision ?

If the condition is left untreated, it can damage eye tissues and can cause scar formation on the cornea leading to visual impairment. As well as this can greatly increase the chances of eye infection.

What is the treatment options for Dry Eyes ?

Standard medical treatment for dry eyes includes two options: artificial tear preparations in the form of eye drops, ointments and inserts or punctal occlusion to prevent the drainage of normally produced tears.

ARTIFICIAL TEARS

Common treatment for dry eyes syndrome includes the frequent use of artificial tears.

Although many people find temporary relief with artificial tear preparations, they merely palliate the symptoms. Artificial tear ointments may also be used. Artificial tear inserts that dissolve slowly when placed under the eyelid

Excessive or prolonged use of artificial tears can disrupt the eye's natural production of tears, leading to further aggravation of the condition instead of providing desired relief.

PUNCTAL OCCLUSION

Many patients tired of using eye drops, turn to punctal occlusion, which may provide long term relief.

Punctal Occlusion is a procedure used to help dry eye patients. It is based on the theory that if the tear outflow is limited by occluding the area from which the tears flow, the amount of tears will increase so that the overall length of time that tears are in contact with the cornea will increase. This may help dry eye patients to be more comfortable.

In punctal occlusion, the doctor closes the drain with silicone plugs, which keeps

Dry Eyes

most of the fluids from being pumped away.

How Dry Eye conditions can be reduced / minimized ?

- Avoid being in a dry atmosphere for a long time
- Avoid direct flow of air of heater or air conditioner on face
- Avoid smoky atmosphere
- Drink 8 to 10 glasses of water daily
- Avoid smoking & tobacco
- Use wrap around glasses or sunglasses when outdoors
- Use lubricating eye drops

What is Computer Vision Syndrome ?

It is estimated that over 100 million working people suffer from computer eye strain. If you spend more than two hours each day in front of a computer screen, you likely experience some symptoms of computer vision syndrome or CVS such as :

- Headache
- Loss of focus
- Burning / tired eyes
- Double or Blurred vision
- Neck and Shoulder pain



CVS is caused by our eyes and brain reacting differently to characters on the screen than they do to printed characters.

Our eyes respond well to most printed material, which is characterized by its dense black characters with well-defined edges which contrast markedly from their light background. Healthy eyes can easily maintain focus on the printed page.

Characters on a computer screen, however, don't have this contrast, or well-defined edges. These characters are brightest at their centers and diminish in intensity toward their edges. Our eyes are unable to maintain focus and remain on plane with these images. They instead drift out to a point called the resting point of accommodation (RPA).

What can be done to prevent CVS ?

- Periodically take short breaks to blink & look away from computer screen.
- Always prefer dark letters against a light background while working.
- Sit approximately 30 inches away from computer screen.
- Lighten the room in such a manner that glare or the screen is minimum or use anti-glare reflective filter or screen.
- Check your posture to reduce neck, shoulder and wrist pain.
- Visit your Ophthalmologist for routine eye checkup every six months to one year.

शुष्क आँखें क्या हैं ?

शुष्क आँखें जो कि केराटो कन्जक्टिवाइटिस सिक्का के नाम से भी जानी जाती हैं, ऐसी स्थिति है जो कि आँखों में गीलापन (आर्द्रता) और चिकनाई (स्नेहन) अपर्याप्त तथा अप्रभावी होने के परिणाम स्वरूप पैदा होती है।

आँख चिकित्सक जिन सर्वाधिक पायी जाने वाली, आम समस्याओं का इलाज करते हैं उनमें से एक है शुष्क आँख। आम तौर पर, यह चिकनाई (स्नेहन) बनाये रखने वाली अश्रु झिल्ली (Tear Film) की गुणवत्ता / मात्रा में समस्या के कारण होती है।

अश्रु झिल्ली की रचना कैसी है ?

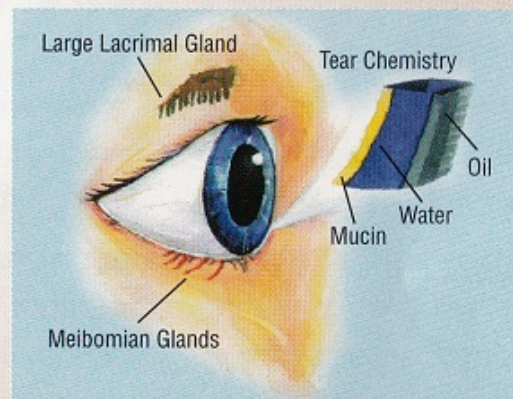
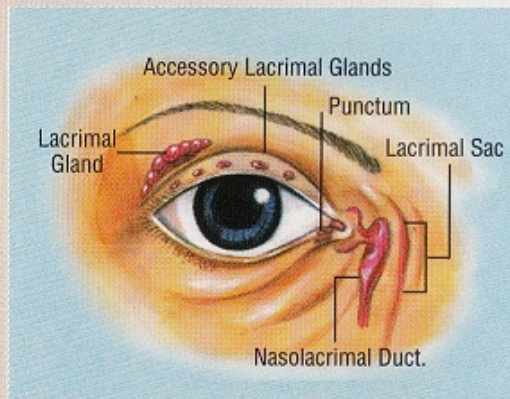
अश्रु झिल्ली आँखों की पलकों को चिकनाई (स्नेहन) तथा कोर्निया (दृश्य पटल) और कन्जक्टिवा (नेत्र श्लेश्मला) की सतह को नमी देने का काम करती है। तदुपरांत आँखों की सतह को पोषक पदार्थ एवं प्राणवायु (ओक्सिजन) प्रदान करती है। इसके अलावा आँख में कदाचित आने वाली बाहरी चीजों को हटाने का काम भी यह झिल्ली ही करती है। अश्रु झिल्ली जीवाणु वृद्धि को रोकती है और आँखों की सतह नर्म, मुलायम बनी रहे इस हेतु एपिथेलियल सतह की अनियमितताओं की भी आपूर्ति करती है।

अश्रु झिल्ली तीन परतों से बनी हुई होती है:

(१) लिपिड - बाहरी परत

(२) अक्विअस - मध्य परत

(३) म्यूसिन - भीतरी परत



शुष्क आँखों के लक्षण क्या हैं ?

- खुजली।
- आँखों में जलन या पीड़ा होना।
- संताप या कोई तकलीफ होना।
- लाल हो जाना।
- धूंधली दृष्टि जो कि आँखें झपकाने से साफ होती है।
- आँखों से अत्यधिक मात्रा में पानी बहना।
- पढ़ने, टी.वी. देखने अथवा कम्प्यूटर पर काम करने के बाद आँखों में ज़्यादा तकलीफ होना।