



## DIABETES ENDOCRINE NUTRITION MANAGEMENT AND RESEARCH CENTRE

**Eye Division**-104 Lady Ratan Tata Medical Centre, M. Karve Road, Mumbai – 400 021. Phone: 2284 0244, 22871613

18 Kala Bhavan, 3 Mathew Road, Mumbai – 400 004. Phone: 2363 4320.

301 Exim Link, Nahur (W), Mumbai-400080. Phone: 2566 1867, 2566 1869

Sunrise Clinic, Bungalow 10-11, Linking Rd, Bandra, Mumbai-400050 Phone: 42724999

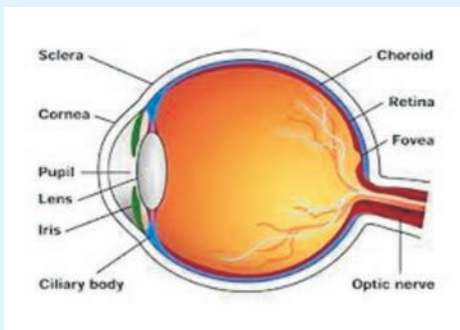
# EYE CARE IN DIABETES

## Why do people with diabetes need an eye check up regularly?

- People with diabetes are at increased risk of developing eye complications, most common of which are diabetic retinopathy, cataract and glaucoma.
- Diabetic eye complications are often silent.

### Diabetic retinopathy

- Currently, diabetic retinopathy is the leading cause of blindness in the whole adult population.
- It is caused by damage to the blood vessels of the light sensitive tissue at the back of the eye (retina). Retina normally works like a photographic film and through the optic nerve sends images to the brain for interpretation.



*A simple diagram of anatomy of human eye showing lens, retina and its blood vessels, fovea (highly sensitive part of the retina responsible for central, sharp vision) and optic nerve*

- Majority of patients who have diabetic retinopathy have no symptoms until very late stages, which may be too late for effective treatment.
- Therefore an eye check up is an effective way of detecting eye complications as early as possible.
- It is important to have an eye evaluation by an ophthalmologist who is experienced with diagnosis and treatment of diabetic retinopathy.

### Who is at risk?

- All type 2 diabetics any time after onset of disease and type 1 diabetics after first 5 years of the disease are at risk of developing diabetic retinopathy, even if their diabetes is under control.
- You are at a higher risk if you have:
  - Diabetes for a long time
  - Poorly controlled diabetes
  - High blood pressure
  - High cholesterol
  - Diabetic kidney disease
  - Pregnancy
  - Tobacco use, Smoking

## Symptoms of diabetic retinopathy

It is uncommon to have symptoms in the early stages of diabetic retinopathy.

As the condition progresses, diabetic retinopathy symptoms may include:

- Spots or dark strings floating in your vision (floaters)
- Dark or empty areas in your vision
- Blurred vision
- Fluctuating vision
- Sudden vision loss
- Difficulty with color perception
- Seeing Flashes of light

## Prevention

You can reduce your risk of vision loss from diabetic retinopathy by:

- Maintaining good control of your diabetes, blood pressure and cholesterol levels
- Stopping tobacco (chewing or smoking)
- Comprehensive dilated eye exam at least once a year
- Seeing an ophthalmologist if you have any of the above mentioned symptoms of diabetic retinopathy

## Glaucoma

- Glaucoma is a group of diseases that damage the eye's optic nerve and may result in vision loss and blindness.
- It is often associated with high pressure inside the eye (Intraocular pressure).
- Diabetic patients are at increased risk of developing glaucoma as the high blood sugar may damage the trabecular meshwork, where the fluid (called aqueous humor) flows out from within the eye. When not drained out efficiently, the fluid collects in the eye raising eye pressure. High pressure inside the eye can damage the optic nerve resulting in vision loss.

**Symptoms:** Most people with glaucoma have no symptoms. The first sign is usually loss of peripheral vision (side vision) which can go unnoticed until late stage in the disease. Occasionally, intraocular pressure can rise acutely to very high levels, which may give rise to following symptoms: Pain in the eye, Nausea and vomiting, Seeing haloes around light, Blurred vision, Advanced stages - Tunnel vision.

Regular eye examination is the key to detect glaucoma early enough to successfully treat it and prevent further damage to vision.

## Cataract

- Cataract is a clouding of the normally clear lens of the eye.
- The lens is what allows us to see and focus on an image.
- People with diabetes get cataract at an earlier age.

**Symptoms:** Blurred vision, Glare

**Treatment:** Surgery - in which the cloudy lens is removed and is replaced with an artificial lens

Our aim: To detect sight threatening eye complications at an early stage and protect your vision



*An educational activity of Help Defeat Diabetes Trust and Dr. Chandalia's DENMARC*

© Denmarc. All Rights Reserved.

