

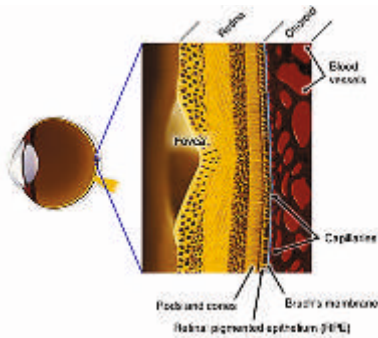
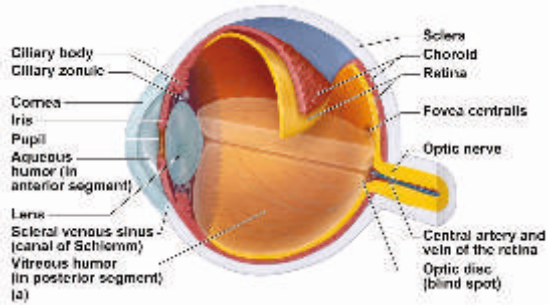
DIABETIC VISION LOSS

Symptoms, Prevention & Treatment of
Diabetic Macular Edema (DME)



1 in 3 people
with Diabetes
develops Retinopathy
over their
lifetime

The human eye has been called the most complex organ in our body. Light enters through the cornea, passes through the opening in the iris, called the pupil, and then to the lens, which focuses light on the retina - the inner lining of the back of the eye.



Retina

The retina is lined with light-sensitive cells, or photoreceptors, called rods and cones. The macula is the center of the retina, and it is responsible for sharp central vision. The fovea is a small depression in the macula that provides the sharpest vision of all. When light reaches the retina, the photoreceptors send impulses along the optic nerve to the brain, which interprets them as vision.

What is Diabetes?

Diabetes Mellitus is a disease that interferes with the body's ability to use and store sugar, which can cause many health problems. Too much sugar in the blood can cause damage throughout the body, including the eyes. Over time, diabetes affects the circulatory system of the retina.

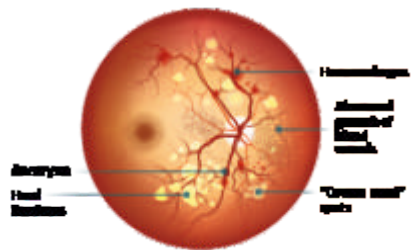
How does Diabetes affect the eye?

Diabetes produces weakening of the blood vessels in the body. The tiny retinal blood vessels are particularly susceptible. The damage of the retinal blood vessels, accompanied by certain structural changes in the retina, is termed as diabetic retinopathy. This results in loss of vision.

What is Diabetic Retinopathy?

The most common eye complication in diabetes is Diabetic Retinopathy. It causes progressive damage to the retina which results into a serious sight-threatening complication. Early detection and timely treatment of diabetic eye disease significantly reduces the risk of vision loss. Diabetic Retinopathy produces visual symptoms only when it is very advanced. Since only an ophthalmologist can detect early signs of diabetic retinopathy. There are two main cause of vision loss in diabetic retinopathy:

- Proliferative Diabetic Retinopathy
- Diabetic Macular Edema

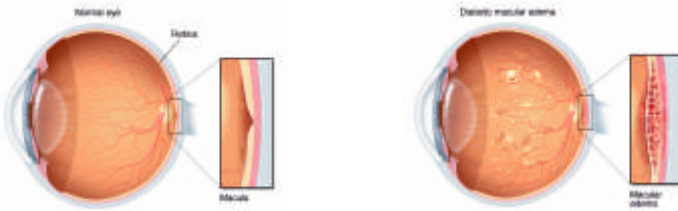


What is Proliferative Diabetic Retinopathy?

In this condition very small blood vessels grow from the surface of the retina. These growing blood vessels are very delicate and bleed easily into vitreous resulting in sudden severe vision loss.

What is Diabetic Macular Edema (DME)?

When damaged blood vessels leak and deposit fluid over or under the macula it results in swelling and vision impairment, resulting in moderate vision loss. Macular edema is the most common cause of vision loss in people who have diabetes.

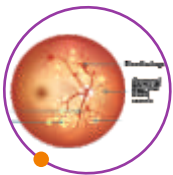


What are common symptoms of DME?

Diabetic macular edema doesn't always cause symptoms, but you may experience depicted below differences in your normal vision



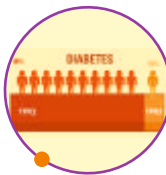
Who is at major risk of DME?



Degree of Diabetic Retinopathy



Severe hypertension



Types/length of Diabetes



Obesity



High Level of fat in blood

Will all diabetics develop DME?

Any person with diabetes can potentially develop diabetic macular edema. If you have had diabetes for years your retina may develop this condition. However it is observed that nearly half of all people with diabetes will develop some degree of diabetic macular edema during their life time.

How to manage DME?

Diagnosis

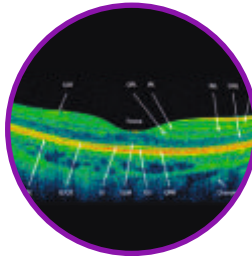
Ophthalmoscopy: The Ophthalmoscopy provides a magnified view of the retina structure in detail

Optical Coherence Tomography (OCT): It is a diagnostic technique that gives clear image of retina with high resolution pictures.

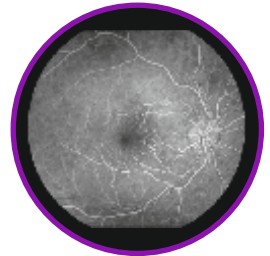
Fundus Fluorescein Angiography (FFA) : It is a common procedure that is performed to give more information about the condition of the retina blood vessels. A dye is injected into your arm that travels to your retinal veins to be photographed for blockages.



Ophthalmoscopy



Optical Coherence Tomography



Fundus Fluorescein Angiography

Treatment

Anti-VEGF Injection Therapy

The current standard of care for macular edema is intravitreal injection. Anti-VEGF Injection treatment blocks the activity of VEGF and slows the progress of macular edema and reduces the risk of subsequent vision loss.



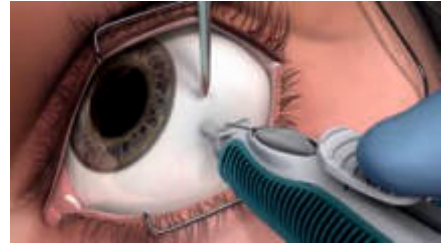
Laser Photocoagulation

It is also treatment for DME. If applied timely, laser photocoagulation can at best maintain the current visual acuity and thus reduce the risk of vision loss, but rarely improve vision.



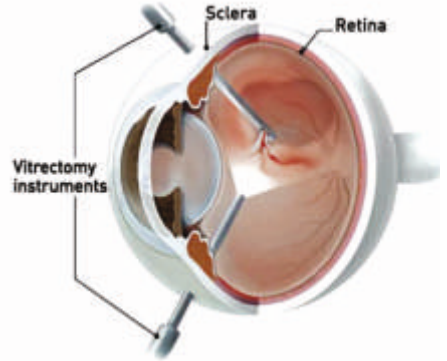
Intra Vitreal Steroids

IV Steroids are used for medical therapy in treatment of DME. Corticosteroids, such as dexamethasone, fluocinolone acetate and triamcinolone acetonide are often used as intravitreal implants or intravitreal injections for the treatment of DME. The corticosteroids suppress inflammation and reduce leakage of fluid from blood vessels.



Vitrectomy

Vitrectomy is an operation to remove the vitreous gel from the inside of the eye. This is necessary in order to carry out procedures that cannot be performed with the fluid in its place. In this procedure, the vitreous gel is replaced by either silicone oil, saline solution, air or gas, all of which are replaced by the eyes own fluid over time.



Combination Approach

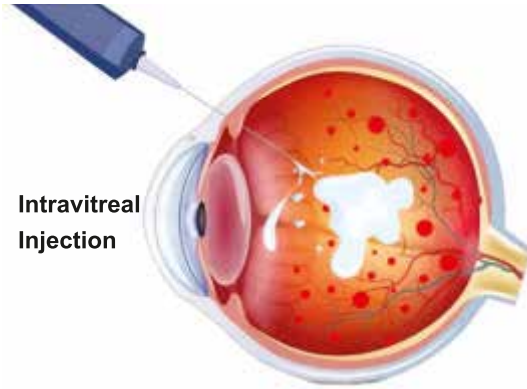
Combinations of anti-VEGF compounds with the laser treatment may offer a higher chance of improving vision-related function and quality of life.

Routine care



Anti-VEGF Injection Therapy

It is an approved medication for Diabetic Macular Edema



How does it work?

It inhibits the formation of new blood vessels behind the retina and may keep the retina free of leakage and reduces the risk of subsequent vision loss.

The effect of drug lasts for a month or maybe more, hence the number of injection you receive, will depend on your condition and as per your doctor's advice.

Benefits

Treatment with anti-VEGF injection may improve important visual qualities (color, brightness & sharpness) and several activities like reading, watching television, driving car etc. which influence quality of life.



Disclaimer: This material is for information purpose only. It does not replace the advice or counsel of a doctor or healthcare professional. We make every effort to provide information that is accurate and timely, but makes no guarantee in this regard. You should consult comply with only on the advice of your ophthalmologist or healthcare professional.



INTAS PHARMACEUTICALS LIMITED

Near Sola Bridge, S.G. Highway, Thaltej,
Ahmedabad – 380054, Gujarat, INDIA.
Website : www.intaspharma.com

