Eye Examination in Diabetic Retinopathy

Every diabetic is at risk for developing diabetic retinopathy. Sometimes this can happen even if the blood sugar is kept under good control. There are no symptoms at the initial stages. Periodic eye examination with dilated pupils is the only way to detect diabetic retinopathy in early stage and prevent further deterioration of vision.

Diagnostic tools such as a slit lamp, ultra sound and procedures like fluorescein angiography are used in addition to an ophthalmoscope, to assess the level of diabetic retinopathy.

Fluorescein Angiography

This is a magnified photography of the retina using an injectable dye. It helps to stage diabetic retinopathy, record changes in the retinal blood vessels, and to decide on the need and mode of treatment and evaluate the treatment.

Treatment

Lasers are widely used in treating diabetic retinopathy. It is an intense and highly energetic beam of light that can stop or slow down the progression of diabetic retinopathy and improve or stabilise vision.

The Laser Experience

Laser treatment is usually performed as an outpatient procedure. The patient is given topical anaesthesia to prevent any discomfort and is then positioned before a slit lamp. The ophthalmologist guides the laser beam precisely.
Diabetes can cause damage to the retina and lead to Blindness

**Vitrectomy**

In some patients, there may be bleeding into the vitreous or the vitreous may pull on the retina reducing vision severely. These are signs of advanced stages of Diabetic Retinopathy. In such instances a surgical procedure called vitrectomy (replacing the vitreous by a clear artificial solution) is performed.

**Diabetic retinopathy is often symptomless until the last stage. Once symptoms show up, it is often too late to prevent loss of vision. Hence all diabetics must visit an ophthalmologist once a year to monitor the retina and watch for diabetic retinopathy. Once it is diagnosed, they may need frequent visits to check the progression of the disease with appropriate treatment.**

1. The laser is beamed into the eye
2. It passes through the transparent structures of the eye and continues on to the retina
3. It is stopped by the pigment layer of the retina, where it is converted into heat. The heat coagulates, or congeals the retinal layers

on the areas to be treated, with the aid of the slit lamp and a special contact lens. Absorption by the diseased tissue either reduces the retinal thickening or stops bleeding. Additional treatment may be required depending on the patient's condition.

**SIDE EFFECTS:** Some patients may experience side effects after laser treatment. These are usually temporary. Possible side effects include watering eyes, mild headache, double vision, glare or blurred vision. In case of sudden pain or vision loss, the ophthalmologist must be contacted immediately.

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**REMEMBER**

Diabetic retinopathy is often symptomless until the last stage. Once symptoms show up, it is often too late to prevent loss of vision. Hence all diabetics must visit an ophthalmologist once a year to monitor the retina and watch for diabetic retinopathy. Once it is diagnosed, they may need frequent visits to check the progression of the disease with appropriate treatment.

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Periodical Checkup by an ophthalmologist is the only means to Preserve Vision