## **Facilities**

- · Comprehensive eye care
- Vitreo-retinal surgery-for eye haemorrhages, macular hole, infections, epriretinal membranes, retinal detachment, foreign bodies and complicated diabetic eye disease
- Fundus fluorescein angiography-to see leakages in diabetic retinopathy,vascular occlusion, maculopathies, aging eye
- Indirect ophthalmoscopy and slit lamp bimicroscopy-for complete evaluation of retina
- Laser for diabetic retinopathy, vascular occlusion, retinal holes and other macular diseases
- · YAG laser for 'after-cataract'
- Cryotherapy for retinal breaks and eye tumours
- · Buckling surgeries for retinal detachment
- Glaucoma diagnosis and treatment
- Orthoptic exercises and surgery for squint

Expertise, Technology, Care



## The Eye Clinic Centre for Retina & Lasers

www.the-eye-clinic.in

DR. ABHAS MEHROTRA
MD (AIIMS), FICO (Germany)
Eye Specialist
Vitreo-retina Surgeon

Fellow: All India Institute of Medical Sciences, New Delhi Universtat Klinikum, Hamburg, Germany

3-A Chakrata Road (Near Bindal Service Station)
Dehradun-248001 Tel: 0135-2723069
E-mail: info@the-eve-clinic.in

## Hypertension and the eye



## Hypertension and the eye

Hypertension or high blood pressure leads to many changes in the blood vessels of the body. These same changes in blood vessels affect the eyes in many ways. It can cause the following problems in the eye

- Hypertensive retinopathy
- Macro-aneurysms
- Branch retinal vein occlusion (BRVO) and vitreous hemorrhage
- Optic nerve involvement (Optic neuropathy)
- Involvement of the nerves supplying the eye muscles, leading to temporary paralysis or weakness of these muscles

Signs of hypertensive retinopathy are frequently seen in adults 40 years and older, and are predictive of incident stroke, congestive heart failure, and cardiovascular mortality-independently of traditional risk factors

Many of these conditions may not have any symptoms in the initial stages. Therefore it is important to have a periodic eye checkup to detect these.

Branch retinal vein occlusion (BRVO) may lead to a blurring of vision especially for fine work. A vitreous hemorrhage may lead to a more severe loss of vision associated with a shower of red floaters.

Optic neuropathy may lead to painless loss of vision.

Paralysis or weakness of the muscles of the eye leads to restriction of movement of the eye and double vision.

Eye is the only organ of the body where one can observe the blood vessels directly. Hence, eye examination will help the physician observe changes in blood vessels because of hypertension. This gives an idea about the severity of the disease elsewhere in the body.

Presence of disc swelling (grade 4 hypertensive retinopathy) is an indicator of a very severe, life threatening rise in blood pressure, which warrants emergency treatment to control the blood pressure.

The patient can have changes of both diabetic retinopathy and hypertensive retinopathy. In fact, presence of hypertension may lead to exacerbation of the changes due to diabetic retinopathy. Therefore it is important to control the blood pressure in a patient with diabetic retinopathy.