# **About Sight and Smile Centre**

Sight and Smile Centre is a state-of-the-art eye and dental care facility established in 2008 in the heart of the Indian capital, New Delhi with the aim of providing world-class healthcare services at affordable costs to all sections of society. Located in Central Delhi, 100 metres from the Patel Nagar Metro station (on the blue line of the Delhi Metro transit system), the facility is also easily approachable by road. Vehicle parking facility is available. Spread over an area of 7200 sq ft. the centre is fully air-conditioned and has an elevator facility for patient convenience. It complies with all fire safety regulations. The comforting ambience, the warm atmosphere and cleanliness make it stand apart. Medical records of patients are maintained for future reference. The facility prides itself in having a fully-equipped ultra-modern eye operation theatre, which is one of the largest in the city. The centre is registered with the Directorate of Health, Govt. of NCT of Delhi and functions from 9 am to 9 pm (Monday - Saturday). Emergency services can be availed round-the-clock. Dr. Pankaj Malik heads the eve department while Dr. Jvoti Malik heads the dental department. It is our constant endeavour to provide such preventive and restorative services to patients that they have the best of sight and smile.



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# NEURO-OPHTHALMOLOGY

Where neurology and ophthalmology meet!



Thyroid eye disease Cranial nerve palsy

Patient Information Brochure "Not valid for legal purposes

# What is neuro-ophthalmology?

Neuro-ophthalmology is a branch of science that combines the specialities of neurology and ophthalmology and deals with disorders of the optic nerve, orbit and brain associated with visual symptoms, eye movement dysfunction and pupillary abnormalities. Multifocal VER and ERG are specialized tests used to diagnose and monitor many of these complex disorders.

# What are the common neuro-ophthalmic diseases seen in clinical practice?

- Optic neuritis (inflammation of the optic nerve).
- Ischaemic optic neuropathy.
- Compressive optic neuropathy (including pituitary tumours).
- Inflammatory and infectious optic neuropathies.
- Papilledema.
- Thyroid eye disease.
- · Myasthenia gravis.
- Brain tumours.
- Blepharospasm and hemifacial spasm.
- Ocular motor disorders (including cranial nerve palsy).
- Cerebrovascular disorders.
- · Pupillary abnormalities.
- Hereditary optic neuropathies.

# THYROID EYE DISEASE

# What is thyroid eye disease?

Thyroid eye disease, also called thyroid ophthalmopathy, is caused by an autoimmune disorder of the thyroid gland and is characterized by enlargement of the extraocular muscles and increase in fatty or connective tissue volume inside the orbit. The ophthalmopathy can be present in hyperthyroidism, hypothyroidism or even euthyroidism.

# Ocular symptoms of thyroid eye disease

- · Watering of the eye.
- Foreign body sensation.
- Eye pain.
- Blurred vision.
- Double vision (diplopia).
- · Visual field defects.

#### Ocular signs of thyroid eye disease

- Forward bulging of the eyes (proptosis).
- Eyelid retraction.
- Lid lag.
- Restricted extraocular muscle motility.
- Soft tissue swelling.
- Optic nerve compression.



Upper eyelid retraction in left eye

# Diagnostic tests

Thyroid function tests (FT3, FT4, TSH), thyroid antibody test, visual field analysis and orbital imaging (USG B-scan and CT scan) are the specialized tests used for diagnosis of thyroid eye disease.

#### **Treatment modalities**

- Artificial tears.
- Patching / covering one eye and use of prisms in glasses to relieve double vision.
- Eye muscle surgery.
- Surgery for eyelid retraction.
- Orbital decompression: Decompression relieves the pressure on the optic nerve. It can be achieved medically or surgically. Medical decompression involves the use of <u>steroids</u> and sometimes <u>immunosuppressive agents</u> and <u>radiation therapy</u>.

# **CRANIAL NERVE PALSY**

Pressure on or interruption of the blood supply to the nerve causes its dysfunction. Cranial nerve palsy is one of the most common causes of acute double vision in the elderly. It occurs more often in patients with diabetes and high blood pressure. Elevated intracranial pressure, compressive masses, infections and trauma are other causes. CT scan and MRI scan are useful for diagnosis. Some cases resolve spontaneously with time. Control of diabetes and blood pressure is essential. Double vision may be relieved with prism glasses, patching, botox or surgery.