

# COMPREHENSIVE CARE CENTRE FOR MOVEMENT DISORDERS

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#### "A friend in need"

The Movement Disorders Section of the Neurology Department started its functions from July 1996. A Comprehensive Care Centre for Movement Disorders was established by the section in 1998 in collaboration with the department of Neurosurgery and is the first of its kind in India. The aim of the Centre is to provide the most advanced forms of medical and surgical treatment and ancillary services to patients afflicted with various movement disorders. The center also provides training to doctors and conducts several research projects including international collaborative projects including genetics.

#### MOVEMENT DISORDERS CLINIC

Movement disorder specialists trained in the state-of-the-art treatment techniques conduct weekly clinics. This clinic is dedicated to the follow up treatment of all cases of Movement Disorders referred to this centre and does not register new cases directly. New patients (not registered in Sree Chitra Institute before) with movement disorders can register and consult the movement disorder specialist directly in the general Neurology OP on Wednesdays (Registration time: 8.00AM-12.00PM). (The patients are Forward till directed to contact 0471 - 2524262 / 09387774689, (4-6pm) for appointment ced arm for the same). The common movement disorders referred to this clinic include Parkinson's disease (PD), other Parkinsonian syndromes, Tremor disorders, various forms of Dystonia

(abnormal, sustained posturing of one or more parts of the body), Tics ("habit spasms"), Chorea (Involuntary "dancing" movements of the body), Myoclonus (sudden shock-like jerking of various parts of the body) etc. Patients with movement disorders who are not controlled with optimal medical therapy are selected for surgical treatment from the movement disorders clinic. The clinic also provides counseling, education and neuropsychological and psychiatric evaluation through an experienced neuropsychologist and medical social worker. A physiotherapist attached to the clinic also provides guidance on exercise regimens, avoidance of falls, improvement of mobility, walking aids etc. The clinic has 1200 to 1500 annual patient visits.



### **BOTULINUM TOXIN CLINIC**

BOTULINUM TOXIN CLINIC Botulinum Toxin Injections are used for the treatment of focal and segmental dystonia ('dystonia' is a condition characterized by abnormal, often 'twisted' posturing, sometimes accompanied by jerking of any of the parts of the body, like neck,



hands etc) as well as other conditions like hemi-facial spasm (involuntary con traction of muscles of face, causing intermittent, forceful closure of one eye, often accompanied by deviation of face) and post-stroke spasticity (stiffness of muscles occurring in a limb, paralysed

by stroke). The involved muscles are identified and injected using special equipments including Electromyograph (EMG).

A single session gives relief of symptoms (generally varying from 50% to 100%, depending on the condition and the muscles involved) for around 3-4 months and regular re-injections are required for sustained benefit. The injection

is relatively safe. The faculty has vast experience with conducting over 800 treatment sessions so far (1996 - 2010). Patients requiring treatment are selected by the Movement Disorder specialists from their Neurology out patient clinic.

#### MOVEMENT DISORDER SURGICAL PROGRAM

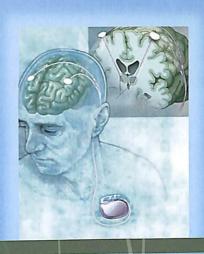
The program is the pioneer of Deep Brain Stimulation (DBS) surgery for Parkinson's disease in India, with the first procedure of Globus Pallidus deep brain stimulation performed in India in June 1999 and one of the leading centres in this field in the country. It was the first to introduce MER (Micro-Electrode Recording, which is used to record the electrical activity of nerve cells in the brain to ensure that the 'DBS electrode' is getting implanted in the correct position) guided DBS surgery and use image guidance (Surgical Planning System and Neuronavigation systems - advanced techniques for accurate targeting of the DBS electrode) for Movement Disorder Surgery in India. DBS treatment is also offered to patients with intractable Tremor and Dystonia. The centre was also the first in the country to revive the modern MR-guided radiofrequency lesioning of an area of the brain called 'Globus Pallidus', for Parkinson's disease. A multidisciplinary dedicated team is involved in the systematic work up and post operative long term management of patients who undergo DBS. The centre has performed over 250 surgeries (Pallidotomy, Thalamotomy & DBS since 1998) for medically refractory Movement Disorders and faculty have presented the results at several international meetings and published their experience in reputed international journals,

All patients referred for DBS surgery or qualify for surgery are to be first evaluated in the clinic. A preliminary evaluation for surgery is done including screening for heart disease, Diabetes, High BP and any other important medical conditions. A detailed evaluation for mood, behavior, intellectual and memory disorders will be done before selection for surgery. Patients and their families will be counseled both by doctors as well as psychologist and medical social worker on the potential benefits and side effects of surgery.

#### New initiatives:

#### MOTOR PHYSIOLOGY LAB

The motor physiology lab run by the Comprehensive Care Center for Movement Disorders is engaged in activities like tremor analysis (to differentiate between different diseases causing tremor) using accelerometric studies, back averaging studies for differentiating between different types of 'myoclonus' and various research projects using modern research tools like transcranial magnetic stimulation. Transcranial Magnetic Stimulation (TMS) is a non-invasive and safe method of stimulating the cerebral cortex and has widespread research applications. The therapeutic (treatment) potential of "repetitive TMS" (rTMS) is an area of growing interest in the scientific community now and the Center is conducting a number of research projects in this regard.



For more details contact:

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Do you really want to help some one who suffers same like you? Then kindly donate medicines for them!"