Stem cells a sure cure for parkinsons

April 14,2015, 01.01 AM  IST | | THE HANS INDIA

For 59-year-old Ashok Kumar, living with Parkinson’s disease (PD) for the last 12 years was nothing less than an ordeal. Kumar who formerly served as a general manager in a private firm, had been leading an active and productive life until he was diagnosed with PD. The progressive neurological disorder brought his life to a standstill and what followed was years of futile treatment and fading hope. However, recently his decision of undergoing  stem cell therapy for PD turned out to be one of the most favourable decisions of his life.

Kumar recalls, “I couldn't walk, stand or sit. I would fall forward and my body constantly suffered from tremors, postural instability and rigidity. I had lost all hope of recovery but Plexus Neuro and Stem Cell Research Centre reignited my hope. Within four months of undergoing stem cell therapy at the centre, my speech, writing ability, posture and body balance have improved drastically and I no longer take any medications for Parkinsonism.



Dr Naeem Sadiq, neurologist and director, Plexus Neuro and Stem Cell Research Centre (PNSRC) with his patient Ashok Kumar

Dr Naeem Sadiq, neurologist and director, Plexus Neuro and Stem Cell Research Centre (PNSRC) says that Kumar would recover completely in the next few months. Kumar is one of the many Parkinson’s patients who have got successfully treated at PNSRC. The centre, which has over 25 years of clinical experience in treating neurological disorders, offers stem cell therapy for neurological, psychiatric and orthopaedic disorders as well as several other incurable diseases.

Previously, medications and certain surgical procedures were the only treatments available for parkinsonism. Whilst medications in the long-term lack effectiveness and may cause side-effects, surgery is not always feasible or fruitful.  In recent years, the application of stem cell therapy for treating PD has turned out to be a boon for the patients. Stem cells are like mother cells which originate from the developing embryo and differentiate into different types of cells, for example- heart muscle, liver, brain, skin, bone etc.

They are also known as progenitor cells since they lead to creation of new cells. Dr Sadiq explains, “Stem cell therapy for Parkinson’s disease involves collection of stem cells from the patient’s own bone marrow. The cells are isolated under CGMP conditions and after quality analysis in the laboratory, the isolated stem cells are re-injected or transplanted into the patient’s body. The stem cells then migrate to the affected area of the brain, get attached there and transform themselves into healthy tissue, thereby replacing the damaged cells”.

After the procedure the patient is discharged the next day. Regular follow-ups are essential and depending upon the severity of disease, a patient may need subsequent doses of stem cell transplant. “The doses and the route of administration of stem cells varies from disease to disease, and from patient to patient. The improvement pattern may also differ for every patient as per the patient’s overall health status and duration of disease.

In case of Kumar, two doses of stem cell transplant in four months period worked effectively,” adds Dr Sadiq.  PD which afflicts about 7 to 10 million people worldwide is characterised by tremors, stiffness of limbs, slowness of movement and impaired balance and coordination. Later stages of Parkinson’s are highly debilitating. As the disease progresses, there is loss of dopamine producing brain cells in the substantia nigra region of the brain. Dopamine, a brain chemical plays key role in regulating coordination and movement of the body.

Till date, the exact reason behind the loss of dopamine cells in parkinsonism has not been elucidated. Dr Sadiq informs that every week, approximately ten patients are diagnosed with PD  at Plexus Neuro Centre. These patients are in different stages of PD.  He asserts, “Early detection and timely treatment of parkinsonism is imperative for positive treatment outcomes. General public lacks awareness of Parkinson’s disease. The initial stage of PD which usually begins as mild tremors on one side of the body is either neglected by patients or misdiagnosed.”