Parkinson's disease

Stem Cell Medicare Protocol for Parkinson's disease:

We at Stem Cell Medicare constantly strive to give the best treatment to our patients. We are using autologous stem cells derived from adipose tissue or bone marrow for the treatment of Parkinson's disease. We customize each treatment protocol for the patient to get the best results.

Since, the cells used in the treatment are derived from the body of the patient, they are safe, effective and there are no side effects of the treatment,

The treatment at Stem Cell Medicare consists of following steps:

1. Qualification after exclusion criteria
2. Adipose tissue/Bone marrow extraction
3. Stem Cell processing
4. Cell transplantation

Parkinson's Disease

What is Parkinson's Disease?

Parkinson's disease (PD) is a progressive nervous system disorder that affects movement. Parkinson's disease (PD) is a neurodegenerative disorder that affects predominately dopamine-producing (“dopaminergic”) neurons in a specific area of the brain called substantia nigra. Although Parkinson's disease can't be cured, medications might significantly improve your symptoms.
Causes:

In Parkinson's disease, certain nerve cells (neurons) in the brain gradually break down or die. Many of the symptoms are due to a loss of neurons that produce a chemical messenger in your brain called dopamine. When dopamine levels decrease, it causes abnormal brain activity, leading to symptoms of Parkinson's disease.

The cause of Parkinson's disease is unknown, but several factors appear to play a role, including, Your genes and Environmental triggers

Symptoms

- **Tremor.** A tremor, or shaking, usually begins in a limb, often your hand or fingers
- **Slowed movement (bradykinesia).** Over time, Parkinson's disease may slow your movement,
- **Rigid muscles.** Muscle stiffness may occur in any part of your body.
- **Impaired posture and balance.** Your posture may become stooped
- **Loss of automatic movements.** You may have a decreased ability to perform unconscious movements, including blinking, smiling or swinging your arms when you walk.
- **Speech changes.** You may speak softly, quickly, slur or hesitate before talking
- **Writing changes.** It may become hard to write, and your writing may appear small.
- **Hands.** movements are slow and face without expression.

Risk factors:

- **Age.** Young adults rarely experience Parkinson's disease. It ordinarily begins in middle or late life, and the risk increases with age. People usually develop the disease around age 60 or older.
- **Heredity.** Having a close relative with Parkinson's disease increases the chances that you'll develop the disease.
- **Sex.** Men are more likely to develop Parkinson's disease than are women.

- **Exposure to toxins.** Ongoing exposure to herbicides and pesticides may slightly increase your risk of Parkinson's disease.

**Diagnosis:**

**How does a doctor diagnose Parkinson's?**

There are no specific tests for Parkinson's disease.

The doctor will consider any known genetic factors for or family history of Parkinson's disease.

**The doctor will ask about:**

- any existing conditions
- any drugs the person is taking
- whether there has been exposure to certain chemicals
- if any close family members have or have had Parkinson's
- if the person has any known genetic factors that might increase the risk
  
  Some early predictors for PD include a loss of the sense of smell and sleeping problems, especially REM sleep disorder.

The early symptoms can be similar to those that occur with other conditions. However, if a doctor suspects PD, they will probably refer the patient to a neurologist or to a movement center.

**Present day treatment:**

Presently there is no cure for Parkinson's but is being managed with LEVO DOPA to control the symptoms. If the symptoms improve, it confirms Parkinson's disease.
Complications:

Parkinson's disease is often accompanied by these additional problems, which may be managed by the doctors.

- Thinking difficulties.
- Depression and emotional changes.
- Swallowing problems.
- Chewing and eating problems
- Sleep problems and sleep disorders.
- Bladder problems.
- Constipation Blood pressure changes.
- Smell dysfunction.
- Fatigue.
- Pain.
- Sexual dysfunction.

- Stem Cell Therapy at Stem Cell Medicare

Stem cell therapy with autologous stem cells from patients own bone marrow have shown very promising results. The bone marrow derived mesenchyme cells are collected from the Iliac Crest of the hip bone. The mesenchymal cells are separated in the laboratory by centrifugation. Half the cells are injected in the vertebral column by intrathecal injection. The remaining bone marrow is sent to a special laboratory for amplification of stem cells and converting them into neural progenitor cells for subsequent administrations. The subsequent administration is via intra venous rout.

- Eligibility Criteria

  - Idiopathic Parkinson's disease (criteria of British Brain Bank: L-DOPA or Apomorphin sensitivity of more than 30% or typical Parkinsonian tremor while resting).
  - Duration of Disease >18 months.
  - Age between 18-85 years.
• Relevant disablement in daily activities/ impairment despite medical mental therapy

**Success Rate:**

**Clinical evaluation of PD patients is done on the basis of-**

- 59% Patients showed improvement in motor symptoms like shaking, rigidity, slowness, of movement and difficulty with walking and gait.
- 48% Patients showed improvement in cognitive and behavioral symptoms - dementia, attention deficit, memory loss.
- 54% Patients showed improvement in sensory, sleep, and emotional symptoms.