Stem Cell Therapy for Parkinson’s Disease

Fact Sheet
Can Stem Cell Therapy help patients with Parkinson’s Disease?

Yes it can. Stem Cells make new cells that replace damaged cells and reverse Parkinson’s symptoms. RMG is now offering patients access to Parkinson’s disease stem cell therapy using amniotic Stem Cells. These Parkinson’s Stem Cell Treatments are being studied for their efficacy in improving complications in patients with Parkinson’s disease, through the use of stem cells. These procedures may help patients who don’t respond to typical drug treatment, want to reduce their reliance on medication or are looking to try stem cell therapy before starting drug treatment.

Below are some frequently asked questions regarding stem cell therapy for Parkinson’s disease.

Frequently Asked Questions for Parkinson’s Disease Stem Cell Therapy

1. How do stem cells work in patients with Parkinson’s disease?

Parkinson’s disease impacts multiple areas of the brain due to a deficiency in a neurotransmitter – dopamine. The loss of neurons in an area of the brain called the substantia nigra causes a decrease in the production of dopamine in Parkinson’s disease. Stem cells make NEW cells in the substantia nigra providing an increase in dopamine which alleviates the tremor and motor problems of the disease. Other areas of the brain utilize dopamine for motivation, cognition, and emotions so these area are helped with the NEW cells made possible by stem cells.

2. What are some of the Parkinson’s disease complications that can be improved through stem cell therapy?

Patients who receive stem cell therapy through RMG often report improvements in one or more of disease related complications such as:

Primary Motor Symptoms
a. Resting Tremor: - Slight tremor (shaking or oscillating movement) in the hand or foot on one side of the body, or in the jaw or face and usually appears when a person’s muscles are relaxed, or at rest (not performing an action).

b. Bradykinesia: - Bradykinesia (slow movement) A general reduction of spontaneous movement,
which can give the appearance of abnormal stillness and a decrease in facial expressivity. Causes difficulty with repetitive movements and performing everyday functions, such as buttoning a shirt, cutting food or brushing teeth, walking with short, shuffling steps, affect on one's speech; quieter and less distinct, drooling and excess saliva result from reduced swallowing movements.

c. Rigidity: - Rigidity causes stiffness and inflexibility of the limbs, neck and trunk. The muscle tone of an affected limb is always stiff and does not relax, sometimes contributing to a decreased range of motion. Rigidity can be uncomfortable or even painful and inhibits the swinging of arms when walking.

d. Postural Instability: - Postural Instability (a tendency to be unstable when standing upright) is caused by uncontrollable reflexes needed for maintaining an upright posture that can cause particular difficulty when pivoting or making turns or quick movements. It can also cause retropulsion (a dangerous tendency to sway backwards when rising from a chair, standing or turning).

Secondary Motor Symptoms

a. Freezing - Freezing of gait; hesitation before stepping forward is a manifestation of akinesia (poverty of spontaneous movement). The feeling as if their feet are glued to the floor can increase a person's risk of falling forward.

b. Micrographia - Micrographia (shrinkage in handwriting). This occurs as a result of bradykinesia (slow movement) and hypokinesia (which refer to the fact that, in addition to being slow, the movements are also smaller than desired).

c. Mask-like Expression - Face appearing less expressive than usual is a manifestation of akinesia (poverty of spontaneous movement [e.g. in facial expression]).

d. Unwanted Accelerations - Unwanted Acceleration is the experience of movements that are too quick causing tachyphemia (excessively fast speech) and festination (an uncontrollable acceleration in gait). Stooped posture - A tendency to lean forward.

e. Dystonia - A neurological movement disorder, in which sustained muscle contractions cause twisting and repetitive movements or abnormal postures.

f. Impaired fine motor dexterity and motor coordination - Encompass the abilities required to control the smaller muscles of the body for writing, playing an instrument, artistic expression, and craft work.

g. Impaired gross motor coordination - Abilities required in order to control the large muscles of the body for walking, running, sitting, crawling, and other activities.

h. Speech problems - Such as softness of voice or slurred speech caused by lack of muscle control.

i. Difficulty swallowing - Dysphagia.
j. Sexual dysfunction - Difficulty experienced during sexual activity, including physical pleasure, desire, preference, arousal or orgasm.

k. Cramping - Neural sensations caused by muscle contraction or overshortening.

l. Drooling - Sialorrhea (the flow of saliva outside the mouth).

m. Akinesia - Poverty of spontaneous movement.

n. Hypokinesia - Movements that are slow as well as smaller than desired.

Nonmotor Symptoms
- Many researchers believe that nonmotor symptoms may precede motor symptoms — and a Parkinson’s diagnosis — by years.

The most recognizable early symptoms include:

Anosmia - loss of sense of smell

Dyschezia - constipation

REM behavior disorder - parasomnia, a sleep disorder

Mood disorders - Depression, bipolar disorder, dysthymic disorder and cyclothymic disorder.

Orthostatic hypotension - Sudden fall in blood pressure upon standing

Other Nonmotor Symptoms

Excessive saliva
Weight loss
Weight gain
Vision problems
Dental problems
Fatigue
Depression
Fear and anxiety
Confusion
Dementia
Skin problems
Cognitive issues
Sleep disturbances
Bladder problems
Sexual problems

3. What are stem cells?

Stem Cells are special cells capable of renewing themselves through cell division, even after long periods of inactivity. Stem cells are formed at conception and have the ability to become different kinds of tissues in the body including muscle, nerve, organs, bone, blood and more. Their exceptional ability to become other types of cells makes them essential in repairing and renewing every kind of tissue and body organ.
Unlike other types of cells in the body, Stem Cells can divide and replicate repeatedly. Stem cells are at the center of a new field of science called regenerative medicine. Because stem cells can become neurons, bone, muscle, cartilage and other specialized types of cells, they have the potential to treat many diseases, including Parkinson's, Alzheimer's, Diabetes and more.

4. **What is stem cell therapy and how does it work?**

   Since we have hundreds of patients with successful results we have been able to identify patterns of where stem cells make NEW cells. This is one of our advantages in helping you! We use the most optimal stem cells for each patient. Usually we strive for pluri-potential cells because these stem cells can differentiate into whatever your body needs. We strive to create the most powerful stem solution. Most powerful means we determine not only the number of stem cells but also the percent that are alive and the percent purity for each type of stem cell.

   Our office currently offers 5 types of stem cells – more than any other office so that we are not limited in creating the best solution for you. Some stem cells are best for muscles, others are better for brain cells still others are better for internal organs. Therefore we have the ability to determine and use the best stem cell solution for you!

   Your own Adult Stem Cells or Tissue-specific Stem Cells harvest from:

1. Blood,
2. Adipose or fat
3. Bone marrow
4. Induced Pluri-potent Stem Cells from your own cells via an affiliated laboratory
5. Amniotic stem cells from purified Placental tissue

5. **What are amniotic Stem Cells?**

   Amniotic Stem Cells are obtained from healthy donors who have volunteered to donate their amniotic fluid after undergoing elective Caesarian delivery. Each donor submits their past medical history and social history for review. The donated tissue is collected aseptically, tested multiple times, and then it undergoes gamma sterilization. This membrane and fluid is rich with the basic components necessary for tissue regeneration.

6. **How long would it take to see improvement?**

   This is one of the most common and important questions a patient can ask. Keep in mind that every patient who receives any type of medical procedure will react differently to their treatment. Patients who have received stem cell therapy through RMG generally see the full culmination or their results from almost immediately to a few months later. Some patients have taken up to 6 months before seeing the full effect of the treatment.
7. **How long does the stem cell treatment through RMG take?**

A patient’s visit for stem cell treatment lasts for only 3 days. The first day will be a new patient orientation followed by a consultation with the treating physician and often a preparation IV. The very next morning the patients will begin their stem cell treatment which will last roughly 2 hours. They will return to the center on the third day for a post-op consultation and an additional IV before returning home.

8. **Will I need to return regularly for follow-ups?**

Patients will only need to visit RMG once for their treatment. Once their treatment has completed, patients will return home where the RMG staff will follow-up with them for our studies on a regular basis. Because the visit lasts only 3 days, patients travel to RMG from all over the world to receive the highest level of stem cell therapy available. Very rarely patients need to come back for additional treatment steps.

RMG offers a complete travel service for patients and caregivers that includes air & ground transportation, Shuttle service and Hotel services.

9. **Am I a candidate for stem cell therapy through RMG?**

RMG follows a strict protocol to determine whether each and every patient is a good candidate for stem cell therapy. Every patient will undergo a full medical history evaluation to determine their candidacy before being approved for treatment.

Providing access to safe and effective stem cell therapy is our absolute goal.

To determine if you, or your loved one, may qualify for RMG Stem Cell Therapy, it is necessary to ask some medical questions. If your answers show that you or your loved one may be a candidate for this treatment, your information will be forwarded to our physician team so they can contact you. Here is the link to our Parkinson’s questionnaire:

http://www.stemcell.life/parkinsons-questionnaire.html

To learn more about becoming a patient and receiving stem cell therapy through RMG, please contact us at (888) 599-7836 or send us an Email at info@stemcell.life.

10. **How much does stem cell treatment through RMG cost?**

The cost of each treatment depends on each individual case. In order to learn more regarding the cost for
treatment, please contact us by calling (888) 599-7836.

11. Could a stem cell therapy be repeated?

Yes, a stem cell therapy may be repeated. Current studies indicate the strong possibility of a cumulative effect from multiple stem cell therapies a patient received for their condition. Long-term studies will attempt to better understand this in detail.

12. Could a stem cell therapy be used at the same time as other therapies?

Yes it can. We often use objective measures to determine the efficacy of Stem Cell therapy. We will evaluate your current medication and therapies to make sure, you receive the best results.

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News and Information

- Breakthrough in stem cell treatment for Parkinson’s
- Breakthrough method produces Parkinson’s disease patient-specific stem cells free of harmful reprogramming genes (Whitehead Institute)
- Stem Cells for Parkinson’s Disease: Breakthrough or Hype? (Wired)
- Research Aims for New Parkinson’s Treatment (UCSF)
- Resources
- NIH: Parkinson’s Disease Information
- Find a clinical trial near you: NIH Clinical Trials database
- National Parkinson Foundation
- Parkinson’s Action Network
- Parkinson’s Disease Foundation
- Michael J. Fox Foundation for Parkinson’s Research
- The Parkinson’s Institute
- Stem Cell Network Parkinson’s disease page
- Family Caregiver Alliance
- National Family Caregivers Association
- The Movement Disorders Society
- GForce-PD: A Global Effort to Bring Cell Based Therapies to Parkinson’s Disease Patients

More Information: info@stemcell.life
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