Stem Cell Therapy for Multiple Sclerosis (MS)

STEM CELL^M INTERNATIONAL

VISCAN

R3

Overview of Multiple Sclerosis (MS)

Multiple Sclerosis (MS) is an inflammatory disease of the CNS that may result in severe disability and neurological defects. Onset usually occurs between the ages of 20 and 40, with the disease being twice as common in females.

MS is the most common cause of neurological disability in young adults worldwide. The four subtypes include Relapsing Remitting, Secondary Progressive, Primary Progressive and Progressive Relapsing. All types of MS are characterized by damage of myelin sheaths, with disruption of normal conduction and nerve impulses. Traditional treatments mostly include medications that relieve symptoms, but to date haven't regenerated nerves in a significant way. The conventional options may reduce the frequency of exacerbations and slow disease progression, but none have myelin or nerve regenerative capability.

Stem Cell Therapy for MS

Stem cell therapy for MS offers the first true opportunity for patients to significantly slow down disease progression and potentially achieve remyelination of nerves.



A 2014 study with 23 MS patients receiving umbilical cord derived mesenchymal stem cells showed a significantly lower relapse occurrence and highly improved functional scores compared with the control group (Cell Transplantation 2014).

A 2018 study of 20 MS patients in Panama was remarkable in its results with umbilical cord stem cells. Each patient received a total of 140 million stem cells and no significant adverse events occurred. Overall, the patients saw improvement in bladder, bowel, and sexual dysfunction, walking, upper extremity physical function, energy and fatigue, along with an improved general perspective of a positive health change and improved quality of life, and improved MRI lesions (Journal of Translational Medicine 2018).

Overall, umbilical cord stem cells have been shown to be a very safe treatment option for MS patients. R3 International offers these treatments with stem cells and exosomes, with cell counts averaging 3-4 million cells/ kilogram.



Frequently Asked Questions

Q What Kind of Stem Cells are used and how many?

R3 does NOT use embryonic stem cells (ESCs) or induced pluripotent stem cells (iPSCs) for treatments, as they are not ready for clinical use due to potential risks. R3 International uses biologics that contain mesenchymal and hematopoietic stem cells. Not only are they safe for patients, they are also effective for many conditions.

Umbilical Cord Stem Cells –

Umbilical cord (UC) tissue is an amazing source of active, potent mesenchymal stem cells along with many other regenerative elements. R3 International offers UC treatments from 5 million stem cells up to a BILLION stem cells! They come from donor tissue after a scheduled c-section with no harm to baby or mother, and





are processed at accredited labs that are cGMP compliant and ISO certified.

Exosomes – These are small extracellular vesicles that are by products of umbilical cord stem cells. Active in cell to cell communication, they facilitate repair and regeneration. R3 incorporates exosomes frequently into patient treatments.

Autologous Adipose – Some R3 International Centers offer stem cell therapy using a patient's own adipose (fat) tissue. Adipose tissue contains plentiful stem cells, exosomes, growth factors, secretomes and other regenerative elements. This is typically performed in conjunction with umbilical cord stem cell treatment.

Q Are there risks involved?

Stem cell and exosome procedures at R3 International are very safe. To date, no patients have experienced a significant adverse event such as disease transmission, deep infection, or rejection reaction. The vast majority of side effects have been mild and temporary.

However, any regenerative procedure with donor material entails risks which may include infection, rejection, allergic reaction, nausea, dizziness, fever, bleeding and others.

Q What are the outcomes?

After nine years and 16,000 stem cell procedures worldwide, R3 consistently achieves an 85% overall success rate. This includes patients with very difficult conditions.

Patients need to understand that stem cell therapy is not a cure for a condition, rather, typically very effective at modifying and/or mitigating disease. It may need to be repeated as well, as patients are different in their response

Safe, Effective Treatment with R3 Stem Cell International

Stem Cell Therapy for MS While not a cure for MS, stem cells are an exciting option as they can facilitate neuron replacement and regeneration. They can home in to sites of damage and stimulate tissue repair and regeneration. Numerous peer reviewed studies have shown excellent benefits and safety of intrathecal umbilical cord stem cells for those with MS. This includes significantly longer survival rate than with traditional treatment and also much better functional scores with activities of daily living.



Partial List of Conditions Treated at R3 Stem Cell International



- Alzheimer's Disease
- Amyotrophic Lateral Sclerosis (ALS)
- Anklyosing Spondylitis
- Anti Aging
- Arthritis & Joint Pain
- Autism
- Back Pain
- Cerebral Palsy
- Chronic Kidney Disease
- Cirrhosis
- COPD
- Crohn's Disease
- Degenerative Disc Disease
- Diabetes
- Erectile Dysfunction
- Failed Back Surgery
- Fibromyalgia
- Heart Failure
- Hepatitis
- Inflammatory Bowel Disease
- Kidney Failure

- Liver Failure
- Lung Disease
- Lupus
- Lyme Disease
- Neuropathy
- Multiple Sclerosis
- Muscular Dystrophy
- Osteoarthritis
- Parkinson's Disease
- Post Concussion Syndrome
- Post Covid
- Psoriasis
- Pulmonary Fibrosis
- Rheumatoid Arthritis
- Scleroderma
- Spinal Cord Injury
- Spinal Muscular Atrophy
- Stroke
- Traumatic Brain Injury
- Ulcerative Colitis

Getting Started



Starting the process for treatment at R3 Stem Cell International is easy. You can visit **R3Stem.com** to see the various locations available and complete your consultation request, or also call us at

+1 (888) 988-0515

Each prospective patient undergoes a virtual consultation with one of our highly experienced stem cell doctors. Very convenient!

Find out today if you or a loved one is a candidate for life changing stem cell therapy.

