

## **Stem Cells Fight for Patients Whose Bodies Fight Them Back**

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Thanks to breakthroughs in modern medicine, including infection control and general public health education, people over the past half-century have been living longer. Some of this longevity could be in part due to lifestyle and environmental changes, but much of the credit is owed to advances in preventative medicine. However, with this increased life expectancy comes an unexpected caveat. As people live longer and their lifestyles change, so do the kinds of diseases that afflict them. Diabetes is on the rise as people become more inactive, eat more processed foods and animal products and put on excessive weight. Heart disease is still the leading killer but now is more likely to be caused by lifestyle, diet, and lack of exercise than smoking. As people live longer and enjoy their golden years well into their 80's and even 90's, they feel the effects of aging and degenerative changes over time. Degenerative and autoimmune diseases are more prevalent now, probably due to longer life expectancy, environmental pollution, and undeclared additives to all foods, fortuitously, the field of regenerative medicine has a plan to even the odds.

It is estimated that autoimmune diseases affect as many as 50 million people in the United States alone. These diseases may leave those afflicted with longstanding irritation, chronic pain, significant loss of function and disability. Like degenerative diseases, the prognosis may be grim, and the only common medical option is to control symptoms and try to limit damage in the short and long-term. While the medical model is predicated on allowing the body to self-heal when possible, this model falls short when the body continues damaging itself. Autoimmune conditions are often chronic, and may cause pain and disability, and they may cause cyclical flare-ups. The underlying pathology in autoimmune diseases is that the body's natural defenses attack elements of one's body itself. So, healthy cells, organs, and tissues are left with inflammation, damage, and limited function. There are over 100 known autoimmune conditions including type 1 diabetes, Crohn's disease, rheumatoid arthritis, and multiple sclerosis.

Most autoimmune diseases are caused by genetic, environmental, and lifestyle factors. While predisposition to around 30% are passed down genetically, 70% are triggered by known or unknown bacteria, viruses, chemicals, as well as poor dietary deficiencies and substance abuse.

The most common symptoms are extreme fatigue, pain in joints and muscles, and possibly weight loss. Many patients in the early stages do not recognize the symptoms as being related to auto-immune disease, resulting in a delay of diagnosis and treatment. While modern medicine has attempted to address autoimmune conditions, conventional treatment modalities only extend to treatment of physical symptoms such as pain and inflammation, without addressing the causes. Pain relievers and anti-inflammatory drugs only address the symptoms, not the pathology and cause, and as a result, offer only temporary relief. More specialized medicines, targeting the immune system, weakening it, leave the patient open to opportunistic infections and further complications.

However, Stem Cell science has shown that stem cells taken from a patient's own adipose (fat) tissue can help heal damage caused by the immune system's misguided attack. Rather than masking symptoms (which function as the body's alarm system that damage is happening), stem cell therapies allow the body to regenerate and repair itself naturally. It is like getting a transplant from yourself, as the cells originate and end up healing the same biological system- your own body. Stem cells are also immune system modulators, resetting and re-booting the immune system's "good/bad filter" and button, and restoring proper function over time. There is no surgery involved, with one outpatient procedure similar to liposuction, only a mini-version of it; and the patient can return home to their normal routine activities following a simple injection.

For many people, healing from disease is as simple as an antibiotic, a flu shot, or a change in diet. However, for sufferers of autoimmune diseases, the day-to-day life that we mostly take for granted is a constant struggle. The very systems biology put in place to fight infection and prevent short and long-term damage, paradoxically do the reverse- damaging them at different rates, and modern medicine simply aims to hide the outward signs so that they can regain a little functionality. Thanks to advances in the field of Regenerative Medicine, better ways have been found to treat inflammation and pain to restore their quality of life.

At Gulf Coast Stem Cell Regenerative Center, which is an affiliate partner of the Cell Surgical Network, we conduct patient-funded research with the intention of treating patients with their own autologous stem cells. We aid in the management of autoimmune, degenerative, inflammatory, and ischemic conditions, and our highly skilled team of providers is committed to

the goal of alleviating symptoms, enhancing functionality, and improving overall quality-of-life for our patients. Contact Gulf Coast Stem Cell and Regenerative Medicine Center and let us show you what “Excellence with a Human Touch” means. For more information on the full list of diseases and disorders that we currently address, please call (866) 865-4823 or contact us via our website, today.



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