

# Ankylosing Spondylitis







## **Overview**

Ankylosing Spondylitis is a type of arthritis that affects the spine. A rigid spine is the resultant of the spine's bone growing or fusing together. The changes may be mild at first or severe leading to a stooped-over posture. Diagnosis and treatment of the disease at the initial stage may help control pain and stiffness, and also prevent significant deformity.

It can occur at any age, however, strikes men in their teens and 20s. It is less common and generally milder in women. About 0.1% to 0.5% of the adult population is affected by Ankylosing Spondylitis. With advancements in the field of medicine, doctors now have a cure which is Ankylosing Spondylitis stem cell therapy.

This inflammatory disease can cause some of the vertebrae in your spine to fuse together. This fusion makes the spine less flexible and can result in a hunched-forward posture. If ribs are affected, it may be difficult to breathe deeply. Stem cell treatment for Ankylosing Spondylitis can pose as a cure to the trouble.



Pain and stiffness

Pain in ligaments and tendons

Loss of appetite

Eye inflammation

Fatigue



Ankylosing spondylitis has no known specific cause, though genetic factors seem to be involved. In particular, people who have a gene called HLA-B27 are at a greatly increased risk of developing ankylosing spondylitis. However, only some people with the gene develop the condition.

## Diagnosis



HLA B<sub>2</sub>7

X Ray

**Blood Test** 

MRI both hip joints including sacroiliac joints

**ESR** 

C reactive protein

2 D Echo

## **Adverse Reaction**

We comprehend that patients might have apprehensions about adverse reactions to the treatment. Possible side-effects of stem cell therapy may differ from individual to individual; any complications depend upon the type of processes you are undergoing.

Side-effects experienced by our patients are consistent with predictable reactions for routine IV and LP injections. The most common reactions to the treatment are fever, headache, diarrhea, leg pain, vomiting and allergic reactions. Less than four percent of patients experience any of these signs.

#### The most common reactions to the stem cell treatment are:

Fever Headache Diarrhea Vomiting

Leg Pain

Allergic reactions





## **Treatment Procedure**

Global Stem Cell Care

The Global Stem Cell Care offers a very safe and non-invasive treatment protocol and procedure. The patients can travel the next day. The following is the day-wise schedule for the patients.

#### Day 1-

- •Pick up from the Airport to the Hospital
- •Interaction between Dr and Patient, to clear all their doubts at that time
- Admission procedure
- •Clinical examination & Lab test will be done prescribed by the doctor

#### Day 2-

- •Stem cell Procedure
- Supportive therapies
- Physiotherapy

#### Day 3-

- Supportive Therapy
- Physiotherapy
- Discharging formalities
- •Drop back to the Airport



















#### **International Patient Facilities**

Quote/treatment plan
Complimentary airport pick up
Scheduling of all medical appointments
Cost estimates for anticipated treatment

Visa assistance letter Dedicated guest relation officers Coordination of the admissions process





## **Treatment**



The majority of the cases of AMD involve the slow-developing type of AMD, called dry AMD. Currently, as of 2020, there are no treatment options available for dry AMD, but some promising new therapies are in it. The slow-developing form of AMD, called dry AMD, constitutes the majority of AMD cases. There are no treatment options currently available for dry AMD as of 2022, but some exciting new treatments are in the pipeline.

For all aspects of medicine today, including multiple cases of cancer, as well as for dry AMD, stem cell treatment is gaining momentum. The aim of stem cell treatment for AMD is to be able to replace retinal cells that have been damaged or killed by symptoms with new stem cells.

Stem cells are also inserted, through IV infusion, into the blood supply of the body. But, experts are focusing on how the stem cells can be transplanted directly into the eyes. One strategy involves placing the stem cells into a fluid suspension that can be injected under the retina

We use the unique technology of Mesenchymal stem cells extracted from Wharton's jelly (WJ) for treating MS. WJ-MSCs offer remunerative and budget friendly favorable treatment for tissue engineering purpose. An optic nerve stem cell regeneration aids this and more. They might help in the three peculiarly prominent ways – prevent damage, repair damage and develop new medicines.

The treatment will take place in multiple steps comprising of the following.

- •Qualification for the treatment: Our experts will assess all your past medical history and symptoms to examine and correctly judge the severity of your condition. A series of tests will be performed to gain a knowledge of the stage of disease. As per the test results, our experts will counsel the patient for further process of the procedure.
- •Source Extraction: With guidance and approval from the physician, the source of extraction will be decided. In general, WJ-MSCs are the most potent allogenic sources available. Stem cells from a healthy person (the donor) are transferred to the patient's body. A bone marrow donor is considered for allogenic stem cell transplantation. A scraping from the inside of the patient and his or her sibling's cheek is tested to determine tissue type. An expert will examine to identity Human Leukocyte Antigens (HLAs). If the HLA on the donor cells are identical or similar, the transplant is more likely to be successful. Stem cell for optic nerve atrophy is promoted to aid patients suffering from similar kind of ailment.
- •<u>Laboratory Processing:</u> The extracted samples will be sent to government approved cGMP laboratory for processing. The sample manipulation will take place in a state-of-the-art facility in compliance with the ISO and GMP standards and using the latest technologies. The client will receive a third party certificate from an internationally accredited lab for quality purpose. An optic nerve stem cell therapy provides just that and more.
- •<u>Stem Cell Implantation:</u> Once the stem cells are ready to be implanted, the doctor will identify the most potent method of infusion based on the patient's physical and mental well-being. The only limitation of the allogenic stem cell treatment is that this procedure carries the risk of developing Graft vs. host disease (GVHD), wherein the patient's body rejects the donor stem cells. Human leukocyte antigens (HLA) can help minimize the risk of any side effects. In this procedure, the HLA of the patient and the donor are primarily matched as closely as possible.

<u>Stem cell treatment Aftercare:</u> The patients will be asked to visit the doctors for evaluation. You will be provided counselling for speedy recovery and also kept on check to ensure that no side effects affect the human body.



Stem cells can help restore the weakened retina and can contribute to a complete halt in the process of loss of vision, thus enhancing the general quality of life of humans. The new doors to the cure and changes in Macular Degeneration patients have been opened through Stem Cell Therapy.

Program for Stem Cell Therapies to treat multiple diseases. Each patient receives 200-300 million stem cells during the stem cell procedure. Not only does the sum of stem cells compensate everyday losses, but it beats them by a million times. The stem cell source, which has basically been missing for the last 15 to 20 years, is thus retrieved and revived. Different organs get rejuvenated following our stem cell injection, and they get revived when the new and activated stem cells replace the old ones fully.

Introduced into the retrobulbar space, stem cells may start to work on damaged tissue and begin to rejuvenate the optic fibers and retinal cells. Photoreceptors and other cells can be differentiated from mesenchymal stem cells. It is possible to use segregated stem cells to treat tumors in the macular and retinal cells.



- There are three stem cell classes that vary, based on their position in the body and their potency (the ability to develop in different cell lines). Ophthalmologist performs experiments on both of these classes. Embryonic stem cells (ESCs) are cells that are found at an early stage of development in the inner cell mass of an embryo. ESCs are pluripotent, meaning that in the course of growth they will become any cells.
- Fetal stem cells. Following an abortion or from cord blood, this community of cells is removed from the fetus. Fetal SCs have greater functionality than adult SCs and are pluripotent. Such cells exhibit increased recovery rates of photoreceptors and are capable of sustained doubling during cultivation. Their use, however, is often synonymous with ethical concerns. Study on fetal cells is banned by law in many countries worldwide.
- Adult stem cells, found in mature tissues, are immobile and non-specialized cells. Adult SCs collaborate with new ones to replace dead cells and facilitate tissue regeneration. Nonetheless, they create a microenvironment for tissues, shield them from degeneration (destruction), and also have the capacity to self-renew and create mature cells. Hematopoietic stem cells, mesenchymal stem cells, and neural stem cells may be differentiated by multiple forms of SCs.



Relevant antigens, which are a common cause of incompatibility between donor tissues and the recipient during transplantation, are still not generated. ESCs may be useful in managing retina degenerative disorders, retinal pigment epithelium pathologies, and optical neuropathies. Research on ESCs is banned at the regulatory level in many countries, as their extraction from the embryo interrupts its further production.

## **Patient Testimonials**



#### Andrew Hairston (Long Island, New York)

I was suffering from Ankylosing Spondylitis and didn't really know any good cure for my condition. My brother was surfing the web when he came across this treatment but he had his own concerns with choosing the best facility. He ultimately decided on GSCC and I am thankful to him as the treatment was a smooth experience. I also would like to thank the doctors at this facility for their amazing services.

#### Siddharth Chauhan (Rajasthan, India)

GSCC is an amazingly fantastic place to visit if you are suffering from something such as Ankylosing Spondylitis. I was recommended here by one of my cousins who had had a recent experience in visiting this clinic and told me they were incredible with making them feel comfortable while treating them which was so comforting knowing how much relief I would find once the process was over. GSCC is actually cheaper than most places that I looked up-which makes sense given how well they took care of me. They explained everything beforehand before ever performing any procedures and always made sure it wouldn't cause discomfort or pain for me. It's honestly been hard but, because of them, I'm almost back to being healthy!

#### Mia Butler (Tame side, Greater Manchester)

The best treatment for me has been the one provided by GSCC. I have nothing but praise for their team of professionals! They took the time to explain every detail of my condition to my satisfaction, and then I also got treated well after an intensive diagnosis process. The whole time spent at this centre felt like one big outing since all of them ensured we understood everything before it all happened - going through procedures too! The Doctor listened to me carefully and executed each step flawlessly without missing a beat. I am really thankful to the doctors of GSCC.



PATIENT STORY

info@globalstemcellcare.com



#### KIPA NAKUP

ne from Arunachal Pradesh for Hip Osteoarthritis

Hi, I am Tani Kipa. I am brother of Nakup Kipa who is undergoing stem cell therapy in India. We are from Arunachal Pradesh. Nikup's problem started around thirty years back when he was in school. He started facing some issues while riding his bicycle at that time. We were not aware much about the treatment, so we gave him basic clinical treatment and he carried on with his life. When he was 20 in 2018 during his service, he had to walk a lot because of the nature of his jol as he used to visit different sites. He then started experiencing some pain in his right hip. He then went through MRIs and other test and the suggested him to opt for total hip replacement. We did a lot of research on various treatment choices and then came to know about stem cell therapy. After a few consultations with the crew of GSCC, we decided to opt for stem cell treatment via GSCC. We have come here and we were satisfied with the way they handled our case. Hope my brother gets well soon and we are quite positive about it.



PATIENT STORY



#### I. D. EVAINS

from USA for Ankylosing Spondylitis Treatment

spondylitis stem cell treatment. I am an oil and gas engineer. I was suffering from this ailment since quite some time i.e. about from 10 years. Basically, my hips and mid back was most iffected and sometimes knees as well. I was getting very dejected. I also had some neck issues. I then decided to opt for stem cell treatment for my concerns. I opted for Global Stem Cell Care in Delhi. After the treatment, I was quite happy and experienced a lot of relief from my pain. My joints, which earlier used to be guite painful, are now normal. The staff at this hospital is also very friendly and supportive. They didn't let me feel that I am from a different country. I am thankful to Global Stem Cell Care for such a positive dealing.

## **Improvement**



It's frightening to envision a life without a clear central goal, but there's reason to be hopeful. Doctors are also searching at ways to improve patients with this condition, and they're researching experimental therapies that may one day be used as a therapy. For instance, stem cell development is currently ongoing, with the potential to lead to a cure in the future.

Before these groundbreaking therapies become a reality, it's important to speak with an experienced doctor who will guide you through current procedures for the type of macular degeneration you have already. We have physicians available to work with you, and our doctors will use cutting-edge procedures to keep your eyes as healthy as possible. Patients' effects have changed as a result of stem cell therapy provided by Stem Cell Treatment India.

### **Our Promise**

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## **Post Treatment Care**

#### Postoperative care

The stem cell therapy does not damagingly affect patients in any way. Generally, the patients are permitted to leave after few hours after the completion of the stem cell treatment. A 24-hour patient hotline number is there for any inquiries after their discharge. The concerned physicians or surgeons of the clinic also stay in contact with their corresponding patients through telephone or email. By doing this, they can get the precise feedback about their progress and also suggest further recovery if required. Say for example, in case of a diabetic patient, after hearing about the patient's present symptoms, the concerned doctor can recommend the needed dosage of insulin.

#### **Treatment disclaimer**

It is an imperative fact to comprehend that stem cell treatment in every prospect has the ability to diminish symptoms of numerous diseases. It also has the aptitude of ceasing several degenerative procedures, but one should also know that this treatment may not work for all kinds of patients. GlobalStemCellcare does not have the right of forecasting or warranting the success of this treatment.

In harmony to the current condition of a patient, the medical team of GlobalStemCellcare might propose the stem cell transplantation or may even withdraw the treatment under abnormal situations. However, in any case, the approval of the patient is a must. Keeping the patient's current health condition and unforeseen health hazards in mind, the medical staff might propose an alternative stem cell transplantation process. In exceptional situations, they may entirely cancel the treatment.

# FAQ

#### 1. What is Inflammatory Spondylopathy?

Spondylopathy is a bunch of disorder, involving several chronic joint problems. Although, disorders returning below this cluster have different pathophysiology, the generalized symptoms of all of them are identical. On a general note, symptoms related to the disorder, embrace stiffness within the joints and thereby restricting movements alongside the changes related to the postures.

#### 2. What are the assessments associated with AS?

The assessments of AS are facilitated through the assistance of series of questionnaires that may help your doctor figure out the most effective treatment. From being able to provide you guidance to better manage your issue, you will also be assessed as mentioned below:

The Bath Marie-Strumpell disease score measures the most symptoms of in and of itself as fatigue, back pain, morning stiffness. The score is recorded out of ten basis, a lot of the score is, worse are the symptoms.

The spinal pain can even measure with regard to tub Marie-Strumpell disease score and will be recorded on an individual basis.

The Bath Ankylosing practical Index is scored as per what quantity and level of the disorder affects your ability to hold out day to day tasks.

The work productivity and activity impairment score measures your ability to figure throughout the last week, be it in an exceedingly job or home.

Additionally, different clinical assessments are done like spinal X rays, Specific blood tests like hemoglobin, ESR and serum globulin. Specific genetic tests may be done together with HLA-B27, RA, etc. The patient may be prescribed another imaging confirmations like imaging, X Ray, CT Scan, etc.

#### 3.Can somatic cell treatment, reverse my damage?

Yes, stem cells are the pristine cells of the body, which might create to several differing types of cells upon correct signaling. These cells are exploited with success to differentiate into animal tissue, osteogenic and chondrogenic lineages, these need to be isolated from the terribly own potent sources of the body referred to as Bone Marrow and fat Tissues. They'll be minimally manipulated and implanted back to the body to push neurodegenerations, bone reconstruction, reformation of tendons and cartilages.





## **Global Stem Cell Care**

As a stem cell company at the cutting edge of Regenerative Medicine, GSCC is dedicated to developing technologies and protocols for safe and effective treatments utilising adult stem cells derived from the umbilical cord.

StemCellCareIndia offers a comprehensive range of stem cell solutions in India for the treatment of different kinds of diseases. Our main focus is helping people get back to good health through stem cell treatment. We have association with the leading hospitals, research institutions and medical colleges specialising in regenerative medicine to offer cost – effective healthcare.

Around the world, emerging technologies and advancements in stem cell therapies are driving major changes in healthcare. With the use of potent mesenchymal stem cells isolated from the tissue of umbilical cord, damaged cells are replaced by new cells. This makes the symptoms of the diseases disappear. We are passionate about the latest developments in stem cell therapies and strive to deliver safe and effective treatment options to patients' world over at the highest medical standards.

As the leading stem cell therapy company, StemCellCareIndia takes care of each and every section of the Medical Trip to New Delhi. We ensure our patients get the best healthcare service by bringing in place, the renowned multispecialty hospitals, latest stem cell treatments, economical accommodations and travel options for the patients.

#### **VISION**

Our vision is to provide effective healthcare services to patients all over the world fast and hassle-free. For this, we work closely with some of the best medical centres and research institutions in providing stem cell therapeutic solutions to our patients. Our work is to redesign and deliver the best treatment possible for the safe and fast recovery of patients and make their journey towards 'good health' as stress-free as possible.

#### **MISSION**

Our mission is to provide the international patients visiting in New Delhi, the satisfaction of best treatment for any kind of disease. The face of healthcare has changed over the years and so, have the healthcare costs. We have a professional team that takes care of every need of international patients, from appointment to accommodation. Through our network of internationally accredited hospitals and research clinics, we provide reliable and bespoke assistance. Seeing patients getting healthier and happier is what make us happy.



## **ORTHOPEDIC**

Orthopedic problems are disorders linking to the musculoskeletal system. They might involve the bones, muscles, cartilages, connective tissues or joints. Orthopedic problems might be pathological like fracture, dislocation and tumors; degenerative like osteoarthritis, osteoporosis or inflammatory autoimmune disorders like rheumatoid arthritis, gout, systemic lupus erythematosus (SLE). Long term joint pain, muscle or tendon pain can be exasperating. These pains lead to some of the most common musculoskeletal complications and they can be because of strains, sprains and overuse. The pain is most common on shoulders, back, knees, hip and ankles. It might be a worthy idea to seek medical support when the pain takes a bit longer to subside so you can decrease the chances of it developing into a more serious issue.

Orthopedic stem cell treatment deals with anything that is concerned with muscles, ligaments and joints via stem cells. Any disorders that affect these three portions of the body involve an orthopedic surgeon. Some of these ailments include injuries and sicknesses of the knee, dislocated shoulders, torn cartilages or foot pain.







## SUPPORTIVE THERAPIES

Global Stem Cell Care is unlike any other stem cell treatment provider in the world, the reason? Since its inception, we have been developing and enhancing our stem cell treatment protocols with the notion that stimulation via anumber of supportive therapies is essential to augment stem cell regenerative response. Our treatment methodology permits our patient to maximize their improvements. Learn more about the diverse therapies provided in our treatment practices.

#### **ACUPUNCTURE**

Acupuncture is a method in which practitioners stimulate particular points on the body – most often by inserting thin needles via the skin. It is one of the most effective practices used in old-style Chinese medicine. Acupuncture arouses nerve fibers to convey signals to the spinal cord and brain, stimulating the body's central nervous system. The spinal cord and brain then release hormones accountable for making us feel less pain while improving overall health. Acupuncture might also: upsurge blood circulation and body temperature, affect white blood cell activity (responsible for our immune function), decrease cholesterol and triglyceride levels and normalize blood sugar levels.

#### **EPIDURAL STIMULATION**

Epidural stimulation has aided preceding patients to recoup some voluntary motor function. The technology comprises of a device implanted in the epidural space which constantly delivers electric signals to the spinal cord. These electric signals mimic the ones that are delivered by the brain to voluntarily control the body's movements. The epidural stimulation device is offered by Medtronic.

#### **AQUA THERAPY**

Aquatic Physical Therapy is the practice of physical therapy in a specially designed water pool with a therapist. The exceptional properties of the aquatic environment augment interventions for patients with neurological or musculoskeletal conditions. Aquatic therapy embraces a widespread variety of techniques permitting patients to improve their balance, muscle strength and body mechanics. Aquatic therapy works to boost the rehabilitation process and support efficiency of stem cell treatment.

#### HYPERBARIC OXYGEN THERAPY

Hyperbaric Oxygen Therapy (HBOT) is the medical use of oxygen at a level upper than atmospheric pressure. The equipment necessary comprises of pressure chamber, which might be of rigid or flexible construction, and a means of supplying 100% oxygen into the respiratory system. Published research shows that HBOT upsurges the lifetime of stem cells after inoculation and offers an oxygen-rich atmosphere for the body to function at optimal levels.



#### **NERVE GROWTH FACTOR (NGF)**

Nerve growth factor (NGF) is a member of the neurotrophic factor (neurotrophin, NTFS) family, which can inhibit the death of nerve cells and has several features of typical neurotransmitter molecules. NGF plays an imperative role in the development and growth of nerve cells. NGF is synthesized and secreted by tissues (corneal epithelial, endothelial, and corneal stromal cells), and it can be uptaken by sympathetic or sensory nerve endings and then conveyed to be stored in neuronal cell bodies where it can encourage the growth and differentiation of nerve cells. NGF can exert neurotrophic effects on injured nerves and promote neurogenesis (the procedure of generating neurons from stem cells) that is closely related to the development and functional maintenance and darning of the central nervous system. It is also adept of encouraging the regeneration of injured neurons in the peripheral nervous system, improving the pathology of neurons and guarding the nerves against hypoxia (lack of oxygen)/ischemia (lack of blood supply).

## TRANSCRANIAL MAGNETIC STIMULATION

Research has shown that TMS can efficiently treat symptoms of depression, anxiety, neurological discomfort, stroke, spinal cord injuries, autism and more. This process is very simple and noninvasive. During the process, a magnetic field generator or "coil" is placed near the head of the individual getting the treatment. The coil produces small electrical currents in the area of the brain just beneath the coil via electromagnetic induction. This electrical field causes a change in the trans membrane current of the neuron which results in depolarization or hyper polarization of the neuron and the firing of an action potential.

#### **OCCUPATIONAL THERAPY**

Occupational therapy interventions concentrate on adapting the environment, revising the task and teaching the skill, so as to upsurge participation in and performance of everyday activities, predominantly those that are meaningful to the patient with physical, mental, or cognitive maladies. Our occupational therapists also focus much of their work on detecting and eradicating environmental barriers to independence and participation in day-to-day activities, akin to everyday life.

#### **PHYSIOTHERAPY**

Physical therapy or physiotherapy (often truncated to PT) is a physical medicine and rehabilitation specialty that, by using mechanical force and actions, remediates damages and promotes flexibility, function and quality of life via examination, diagnosis, prognosis and physical intervention. We combine our PT with stem cells for supreme physical rehabilitation improvements.

#### **NUTRITION THERAPY**

Medical nutrition therapy (MNT) is a therapeutic methodology to treat medical conditions and their related symptoms by the usage of a specifically tailored diet formulated and monitored by a specialist. The therapy targets at fixing nutritional inefficiencies and physiological imbalances so as to provide the best environment possible for the stem cells to develop appropriately as well as improving patient's general health.















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