

# Osteoarthritis

Some of the commonly associated problems with musculo-skeletal system are:

- Osteoarthritis,
- Fibromyalgia,
- Osteomalacia,
- Osteopenia,
- Osteoporosis,
- Rheumatoid Arthritis

There are no available cures besides medications to help relieving the pain. Anti-inflammatory drugs or steroidal medicines are commonly prescribed for all such conditions, however long-term effects of these medicines can lead to complications. Maybe the regenerative therapies are the answer to such ailments that can improve the quality of life.

## What is Osteoarthritis?

Osteoarthritis is a degenerative disease of the joints. It is a group of conditions involving articular cartilage and subchondral bone and some other parts of the joints.

## Symptoms

- Joint pain, tenderness, stiffness, swelling, locking, and sometimes an effusion.
- As bone surfaces become less well protected by cartilage, the bone may be exposed and damaged due to friction.
- Due to decreased movement secondary to pain, regional muscles may atrophy, and ligaments may become lax leading to deformities of joints.



### **Diagnosis:**

- **X-ray.** X-rays can show damage and other changes related to osteoarthritis to confirm the diagnosis.
- **MRI.** Magnetic resonance imaging (MRI) does not use radiation. It is more expensive than X-rays, but will provide a view that offers better images of cartilage and other structures to detect early abnormalities typical of osteoarthritis.

**There is no cure for osteoarthritis.**

### **The routine treatments are:**

#### **Treatment consists of self care and therapy**

- Medication, physiotherapy and sometimes surgery can help reduce pain and maintain joint movement.

#### **Self-care**

- Physical exercise, Weight loss, Menthol, and Ice Packs

#### **Medications**

- No steroidal anti-inflammatory drug, Analgesic, Dietary supplement, and Narcotic

#### **Therapies**

- Hydrotherapy, Stretching, Physical Therapy, and Acupuncture

#### **Surgery involves**

- Arthroscopy and Joint replacement

### **Osteoarthritis Treatment with Stem Cells from Bone Marrow/Adipose Tissue:**

As there are no known cures for osteoarthritis and other chronic orthopedic disorders besides medications, physiotherapies or as the last resort, joint replacement surgeries.

Due to innovations in regenerative therapies, stem cells therapies are a great way to improve the quality of life for patients suffering from Osteoarthritis and other orthopedic disorders.

### **Protocol of treatment at Stem Cell Medicare:**

We at Stem Cell Medicare have been giving treatment to patients for neuron-degenerative diseases with autologous mesenchymal stem cells with great success. We strive to design protocol for each patient to suit his needs. The technique is quite effective, safe and without any side effects.

### **The protocol involves the following steps:**

#### **Patient Selection:**

- Adult Or with Parental approval
- Patient with exclusion criteria for each disease
- Written and video consent to receive the treatment

**Stem Cell Extraction:** The mesenchymal stem cells are collected from

- Blood
- Bone marrow
- and or abdominal body fat

Mesenchymal cell separation- The stem cells are separated by special procedure from the, bone marrow or adipose tissue samples.

**Stem Cell Processing:**

The separated stem cells are injected in affected joint directly. Part of the blood, bone marrow and body fat stem cells are sent to a nationally accredited laboratory for amplification and differentiation of neural cells. These cells are administered on the subsequent visits.

**Quality Certificate:**

Each patient receives a third party certificate (nationally accredited laboratory), for quality, quantity of viable cells.

**Implantation of Stem Cells:** The stem cell implantation can be done in the following ways.

- Intravenous administration
- Directly into the affected joint
- Intrathecal (lumber puncture) in case of neural damage
- Intramuscular
- Intra-arterial
- Subcutaneous
- Liberation angioplasty
- Surgical administration for stroke

**Follow up:**

The Staff at Stem Cell Medicare will call you after one month, two months and six months to see the progress of the treatment. This helps us refine our protocols to improve further. You can also call for any other help in case required.