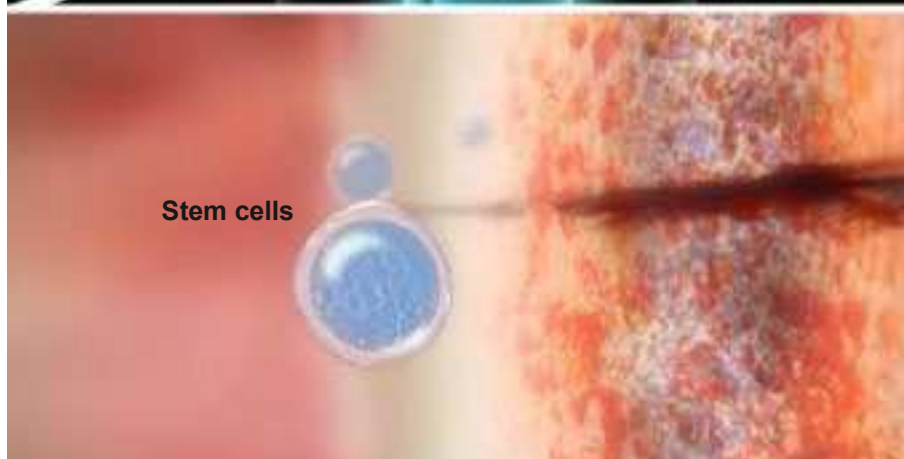


## Stem Cell Therapy for Nonunion Fracture of the Tibia



### Overview

This minimally-invasive procedure is used to treat a fracture of the tibia that has failed to heal after several months with an injection of stem cells drawn from the patient's pelvis. The stem cells promote the natural healing of the fracture.

### Collecting the Stem Cells

The patient is anesthetized, and a trocar and needle are inserted into the top of the pelvis. A sample of bone marrow is drawn through the needle. The bone marrow is placed into a centrifuge, where it is spun rapidly. The spinning process helps to concentrate stem cells contained in the bone marrow. This concentrated bone marrow is then drawn into a syringe.

### Preparing the Tibia

A small incision is made in the leg. A trocar and needle are precisely inserted into the fracture space with the help of fluoroscopic x-ray visualization.

### Injecting Stem Cells

The trocar is removed and the syringe is attached to the needle. The concentrated bone marrow is slowly injected into the fracture space. Stem cells will multiply, repair and rebuild the damaged tissue. The needle is removed.

### End of Procedure and Aftercare

Patients should not bear weight on the fracture until a physician advises them to do so. Regular check-ups will be needed to monitor healing.