

The Regenexx-SD™ Procedure and Your Knee Brace

If a patient has significant loss of cartilage and meniscus in one compartment of the knee or what may be an unstable meniscus tear, our clinic uses an unloader brace after the stem cells are transplanted into that area. The purpose is to reduce forces on these cells while still allowing for activity and cyclic loading (the type of intermittent pressure that comes from walking) which will help the cells differentiate into cartilage or help repair meniscus. These braces can be expensive. Here's what you should know:

These braces come in left and right models.

These braces come either in medial or lateral compartment unloaders. This means that they can either take pressure off the inside or outside of the knee, depending where there is more lost cartilage. Make sure you know which area (inside or outside) where we will want to reduce the pressure. To review for a moment, you want the correct side of the body (right or left) and the correct unloader compartment (medial=inside of knee, lateral=outside of knee). For example, if you've lost the cartilage on the inside of the right knee, you're looking for a right knee medial unloader.

Your unloader brace needs to be adjustable. Many of the models do have adjustment. This means that you need to be able to adjust the amount of pressure it takes off of the area. We will start with maximum unloading of the effected joint compartment by increasing the pressure the brace puts on the joint. As treatment progresses, brace pressure is gradually decreased until the time when brace use is discontinued. The goal here is to allow the cells to set up with small amounts of joint pressure and then condition them to take larger and larger amounts of joint pressure.

Size matters. These braces have a length and a circumference (meaning how big they are in diameter).

Getting the brace and set up. After you schedule your stem cell appointment, we will send an order to an orthotist of your choice. If you are not aware of one, we suggest you research your area for those that accept your insurance. We expect that you will contact us with the name and location of desired orthotist. Orthotists will generally contact your insurance to obtain pre-authorization and will work with your insurance company to get the best coverage possible. The brace is typically covered by insurance and Medicare.

Please discuss with the doctor any specific instructions he may have for you.

Frequently Asked Questions The Regenexx™ Procedure and Your Knee Brace

Q: What number do I set the brace on?

A: A good rule of thumb when setting the dial is to start around 4. However, each custom brace will fit a little different so we usually let our patients decide on what feels comfortable. Specifically, we want for you to feel "moderate" pressure. Not too little and not overbearing. When you look at the gel pad it should be slightly compressed but not completely smashed.

Q: When do I adjust the number and by how much?

A: The dial should be decreased evenly over the 4 to 6 week period after the stem cell injection, so that at the end of the period the setting will be at its lowest number. The brace should be worn for a total of 6-8 weeks from your stem cell re-injection date. The brace pressure should be at #1 at the end of the 6 week period.

Q: Do I wear it to bed? What if I need to get up for something in the middle of the night?

A: The brace should be put on in the morning and taken off at bed time. You do not have to apply the brace if you get up for something in the middle of the night.

Q: Do I wear the brace to swim?

A: You can wear the brace to go swimming. The problem is, that the brace will be wet for a while after you exit the water. Since you're not full weight bearing in the water, you do not have to wear it in a pool. However, if you're going to be in the ocean where a wave may possibly knock you off balance, we would recommend wearing the brace. Always make sure the brace is rinsed thoroughly with fresh water after being in salt water.

Q: Do I need to wear the braces when I am exercising (ex. stationary bike)?

A: The brace needs to be worn during the 4 to 6 week period after your injection while you're weight bearing, including and especially during exercise. You do not need to wear it while on a stationary bike, as it is not a weight bearing activity.

Q: Do I need to wear the brace while I shower?

A: No, your brace can be removed for showering.

Q: Do I need to wear the brace while I'm driving?

A: Your brace can be taken off while driving. However, if you are getting in and out of the vehicle, it is likely simpler to just leave it on.

Q: Why does my brace look different than other people's- medial vs lateral unloader?

A: The braces look different based on which compartment/ligaments of the knee we are unloading (the inside-medial compartment, or the outside-lateral compartment). Medial unloaders have the gel pad on the lateral side of the knee and the lateral unloaders have it on the medial side of the condyle. Some of the medial unloaders are single sided. We use this brace when the doctor determines that there are no ligament issues. The double sided braces also stabilize the ligaments. The single sided brace is slightly more comfortable than the double sided, so we typically choose this when there are no ligament issues. Patients who have no medial or lateral osteoarthritis, but only ligament issues (like an ACL) usually get a derotational brace. This brace looks similar to the double sided brace but has not adjustable hinge since there is no pressure being applied to the condyle.