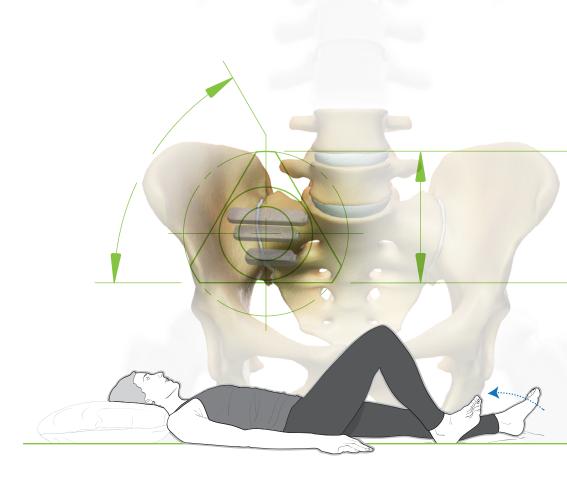
Post-Operative Guidelines

iFuse Implant System®



Patient Education on Post-Op Activities following the iFuse Implant System® Procedure

NOTE TO PHYSICIAN: These guidelines are provided to you to assist your patient on post-operative activities. Which activities apply will depend on your independent evaluation of your patient. Your surgeon may recommend weight bearing as tolerated or limited post-operative weight-bearing on the operated side to allow an optimal environment for healing. Limited weight-bearing may assist with better soft tissue and bone healing, balance, and pain control. Operative Side: Weight-Bearing Status: Touch down weight-bearing: Touch Toe Only Left Right Non weight-bearing: No weight on operated side Right Left Partial weight-bearing: Heel to Toe Roll Through Right Left Weight-bearing as tolerated: Put as much weight as you are comfortably able. Right Left Bilateral Your surgeon may determine that your ability to bear weight may increase by your first post-operative visit. This will be based on multiple factors because patients may have variations in balance, muscle strength, pain, and/or other conditions that affect their healing time and recovery. **Post-Operative Pain and Swelling:** It is normal to have some degree of pain and swelling following a sacroiliac joint fusion surgery. Your surgeon may recommend that you help minimize this by doing the following: Apply a cold pack to the operative site Use a cold pack for minutes times per day • Avoid sleeping with the head of your bed elevated while in the hospital. Avoid sitting for prolonged periods of time the first week following your surgery. Limit duration of your sitting time to minutes at a time Sleep on the non operative side with a pillow between your knees, if possible.

Post-Operative Precautions:

Your surgeon may ask you to follow these guidelines until your first post-operative visit with your surgeon:

- Do not lift operated side leg off the bed with a straight knee.
- Do not lift over ten (10) pounds
- Avoid squatting

Activity: Walk times per day

You may be given a walker or crutches following surgery and instructed to put only the recommended amount of weight on your operative leg(s). Once you can walk safely and independently with your walker or crutches, gradually increase your walking distance a small amount each day. Several small walks are preferable to a single longer walk. Progress to walking short distances outdoors on even surfaces.

Post-operative iFuse Physical Therapy Considerations

Many patients who suffer from chronic sacroiliac joint conditions have or develop secondary musculoskeletal problems of the lumbar spine, pelvis, and/or lower extremities. There are also patients who may have had an underlying musculoskeletal problem that contributed to their sacroiliac condition.

Common musculoskeletal problems affecting the SI joint include:

- General deconditioning
- Weakness of core musculature
- Imbalance of muscle length and/or strength in the trunk, pelvis and lower extremities
- Altered function of adjacent motion segments (lumbar spine and/or hip)
- Restriction and/or scarring in muscles and soft tissues near the SI joint
- Asymmetrical postural habits
- Poor movement patterns
- Underlying balance issues
- Abnormal gait
- Loss of proper motor control
- Pain.

Many surgeons and physical therapists offer a patient-specific rehabilitation program post-operatively to address one or more of these issues. This program may help to optimize the patient's safety and function. The specifics of the rehabilitation program are dependent upon each individual patient's history, physical findings, associated medical conditions, and their functional goals.

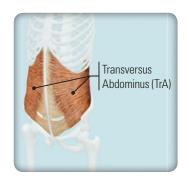
Post-operative rehabilitation after iFuse surgery may include:

- Instruction in patient positioning, posture and body mechanics.
- Instruction in optimal functional movement patterns for activities of daily living (ADLs).
- · Gait training.
- · Balance training.
- Activation, conditioning, and training of core and global stabilizing muscles.
- Normalization of muscle length balance throughout trunk and extremities.
- Normalization of muscle strength balance throughout trunk and extremities.
- Soft tissue and scar mobilization in areas adjacent to, referring to, and including the surgical site on the operated side.
- Mobilization of restrictions in adjacent structures:
 - » Hip capsule and musculature.
 - » Knees, ankle, and foot structures.
 - » Lumbar and thoracic spine.
- Cardiovascular conditioning.

Circulation and Stabilization Exercises

NOTE TO PHYSICIAN: These guidelines are provided to you to assist your patient on postoperative activities. Which activities apply will depend on your independent evaluation of your patient.

Perform the exercises as indicated below by your surgeon or physical therapist. All exercises should be painfree and performed without pelvic motion. The first two exercises below are to help maintain healthy circulation after your surgery. The last four exercises are to maintain circulation and re-educate the muscles that support your pelvis. Research has shown that optimal stability of the pelvis is achieved when certain core muscles, such as your Transversus Abdominus (TrA), are contracted prior to movement^{1, 2, 3}





Perform at least two times per day

Alternate pushing your toes down and bringing them back up on each side.



Activation of Transversus Abdominus (TrA)
(Core Muscle) (10 Repetitions)

Perform at least two times per day

With a pillow under your knees, place your fingertips inside the prominent bones at the front of your pelvis. Inhale, then as you exhale draw in your abdominal muscles as if you are zipping tight pants without moving your pelvis. Hold for five (5) seconds.



Perform at least two times per day

Inhale and then as you exhale activate your TrA to keep your pelvis from moving while you slide your leg slowly towards your buttock. Gently slide leg back to start position using your TrA contraction to keep your pelvis from moving. Alternate between each leg.



Perform at least two times per day

With a pillow under your knees, tighten the muscle on top of your thigh and push the back of your knee into your pillow. Alternate sides.



Perform at least two times per day

With a pillow under your knees, inhale and as you exhale activate your TrA and then tighten your buttock muscles and hold both for five (5) seconds.



Perform at least two times per day

Lay on your non-operated side with a pillow between your knees. Place your upper fingertips inside your pelvic bone. Inhale, and then as you exhale, activate your TrA to stabilize your pelvis. Gently lift your top knee only a few inches off the pillow and hold for five (5) seconds. Lower slowly.

Bed Mobility, Transfers, and Stairs

NOTE TO PHYSICIAN: These guidelines are provided to you to assist your patient on post-operative activities. Which activities apply will depend on your independent evaluation of your patient.

Once you are able to activate your TrA, your surgeon or physical therapist may recommend that you practice contracting it before position changes such as getting out of bed, sitting, standing, or climbing stairs.

Rolling from Back to Side and Getting Out of Bed

Step 1

Prepare to Roll: Begin on your back. Inhale, then as you exhale contract your TrA to stabilize your pelvis. Holding your TrA contraction, slide up the non-operated side leg first and then the operated side leg until your hip and knees are flexed and your feet are resting on the bed.



Step 2

Roll to Side: Inhale, then as you exhale contract your TrA and use the momentum of the arm on your operated side to roll towards your non- operated side without twisting your torso.



Step 3

Side Lying to Sitting: Inhale, and then as you exhale contract your TrA as you push off the table with your non-operated side arm and allow your legs to drop at the same time. The goal is to keep your body in a straight line and not bend your torso.



Sit to Stand Transfer

Move to the forward edge of the surface you are sitting on and pull your non-operated leg slightly behind your operated leg. Inhale, then as you exhale contract your TrA and push yourself to a standing position. The goal is to use your TrA contraction to limit the motion of your pelvis as you move.

Getting In and Out of the Car

Inhale and then as you exhale, contract your TrA to stabilize your pelvis. If possible, push down with your arms to elevate yourself slightly as you turn. Move your legs together as a single unit or in small increments until you are facing outward. Avoid swinging one leg out too far from the other as you move. Then with the non-operated side leg pulled slightly behind, come from sitting to standing as described in the Sit to Stand Transfer section above.



Stairs

Minimize stair climbing until your first post-operative visit with your surgeon. When climbing stairs, contract your TrA to stabilize your pelvis while first moving the non-operated side up a stair and then following with the operated side. Ascend one step at a time. When descending a step, contract your TrA and hold the contraction while lowering the operated side first, followed by the non-operated side. Descend one stair at a time.

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References

Notes

- 1. Richardson CA, Snijders CJ, Hides JA, Damen L, Pa MS, Storm J. The relationship between the transversely oriented abdominal muscles, sacroiliac joint mechanics and low back pain. *Spine*. 2002;27(4):399-405.
- 2. Hodges PW, Kaigle Holm A, Holm S, *et al.* Intervertebral stiffness of the spine increased by evoked contraction of transversus abdominis and the diaphragm: in vivo porcine studies. *Spine*. 2003;28(23):2594-601.
- 3. Hodges PW. Core stability exercise in chronic low back pain. Orthop Clin North Am. 2003;34(2):245-54.

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The iFuse Implant System® is intended for sacroiliac fusion for conditions including sacroiliac joint dysfunction that is a direct result of sacroiliac joint disruption and degenerative sacroiliitis. This includes conditions whose symptoms began during pregnancy or in the peripartum period and have persisted postpartum for more than 6 months. There are potential risks associated with the iFuse Implant System. It may not be appropriate for all patients and all patients may not benefit. For information about the risks, visit www.si-bone.com/risks