

ST. MARY'S SPINE CENTER

PATIENT INFORMATION PACKET FOR

TRANSFORAMINAL LUMBAR INTERBODY FUSION (T.L.I.F.)

The Spine Center utilizes a team approach to care for patients having spine surgery. Specific responsibilities of your team members are outlined below.

- **Surgeons:** Dr. Hsu, Dr. Kondrashov, or Dr. Zucherman will perform your surgery. The surgical team communicates daily with your therapists and your nurse regarding your needs and goals.
 - Dr. Ken Hsu: (415) 750-5836
 - Dr. Dimitriy G. Kondrashov: (415) 750-5847
 - Dr. James Zucherman (415) 750-5835
- **Physician Assistant/Orthopaedic Resident/Spine Surgery Fellow** will be assisting the doctor during surgery and will assist with post-op care. They will be visiting you daily to assess your post-op course.
 - MyLinh Bui, PA-C: (415) 750-5502
 - Kristin Alderisio, PA-C: (415) 750-5725
- **Physical Therapist (P.T.):** Your physical therapist will provide you with information and education regarding your precautions and exercises. Your physical therapist will teach you how to get in and out of bed and how to walk within your restrictions. You will also learn how to monitor your activity and progress safely.
PHYSICAL THERAPY PHONE NUMBER: (415) 668-1000, EXT. 4997
- **Occupational Therapist (O.T.):** Your occupational therapist will help you address daily activities you will encounter at home such as dressing, bathing, showering and toileting. You will learn how to use adaptive tools to make these activities easier and safer within your precautions.
OCCUPATIONAL THERAPY PHONE NUMBER: (415) 668-1000, EXT 6670
- **Orthopedic Nurse:** Pain control, operative care and safety are provided by your nurse, 24 hours per day.
- **Internist:** The Internist will be available to you during your hospitalization to help monitor post-op medications and other medical concerns which might arise in conjunction with your surgery, if necessary.
- **Pain Specialist:** In some cases necessitating complex pain management, you may see a pain physician. This physician will manage your pain control needs and will prescribe your pain medications for home.

POST-OPERATIVE INFORMATION

Following are brief definitions for your information. Your therapist and surgeon will discuss the specific procedures you had performed.

- **Discectomy** - removal of displaced disc material between the vertebral bodies.
- **Laminectomy** - removal of part of the bony arch, the lamina, which covers the nerve
- **Laminotomy** - removal of part of the laminar arch and creation of a "window"
- **Foraminotomy** - enlargement of the opening through which the nerve passes
- **Fusion** - stabilization of appropriate segments of the spine with bone graft material
- **Transforaminal Lumbar Interbody Fusion** - This surgery is done through an incision in the back of the spine. The stabilization of the spine by fusing the vertebrae. The front of the spine uses a cage into the disc space. This takes pressure off the nerve roots. Our surgeons use a process INFUSE, BMP, to fuse your bones, this process is used as a bone substitute to increase the fusion process.

The incision takes approximately 6 weeks to heal. The fusion takes approximately 6 months to 1 year to heal.

Pain: After your surgery, you will experience pain due to the trauma of the operation. You may notice new tightness and pain in your lower back, abdomen and legs. This is usually due to irritation and/or swelling around nerves involved in the surgery.

Controlling your pain is an important part of recovery. A pain medication pump (PCA) delivers a dose of medication every time you press the button and may be used after your surgery.

Activity/Pain at Home: You will have pain after you leave the hospital. The key to managing your pain at home is activity management. As you heal, the inflammation will decrease and you will be able to increase your activity in small amounts. You must manage your activities to prevent flare-ups by following the recommendations of your therapists.

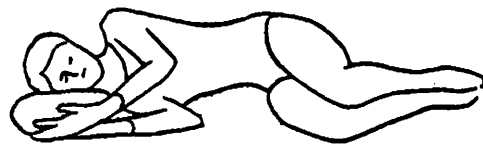
- Pain issues will be managed by your surgeon unless you have a Pain Specialist. All pain medication questions should be referred to the doctor or physician assistant who prescribed your discharge pain medication.

Precautions: The following are in effect for the first 10 weeks following your surgery. They may be modified by your physician at your first month recheck. Be sure to ask if you have any questions.

- Avoid bending forward or twisting in the back. This could irritate the back and slow your healing.
- Wear the brace at all times when you get out of bed to maintain support of your spine.
- NO pushing or pulling or reaching overhead as it puts pressure on your back and tends to cause movement in the back.
- DO NOT lift more than 2 pounds.
- Sit in a reclined position for up to 45 minutes or upright for 5 minutes maximum every 2 hours. Use a lumbar roll to support the curve of your low back.

Guidelines:

- **Position in Bed** - The most comfortable position is on your back with the knees supported by a pillow and the head of the bed raised approximately 45 degrees. When you raise the head in the hospital bed, lay with the bend at your hips and not at your back. You may lay on your side with a pillow between your knees to prevent twisting.

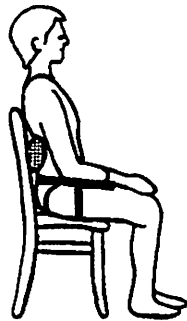


- **Abdominal Bracing** - The abdominal muscles wrap around your trunk and provide support to the spine when they are tensed or "braced". If your back is supported, it helps to keep the back in a safe position. Practice bracing when you move in bed, sit up and walk. It will help to keep your pain to a minimum. Eventually, this will become automatic and you will have developed a natural support for your spine.
- **Log Rolling** - This is a technique to turn in bed. Tighten stomach muscles. Move shoulders and hips at the same time to prevent twisting the spine and roll like a log. Twisting is painful and stressful to the surgical site.

- **Brace** - You will wear the brace until your fusion is solid. You must put it on while in bed unless your physician or physical therapist has instructed you otherwise. You may adjust the brace once you sit or stand. You will wear the brace whenever you get out of bed for approximately 3 months.
- **Getting Out of Bed** - Log roll then slide your legs over the edge of the bed together. Push on your elbow and hand, bracing your stomach muscles and come to sit with shoulders and hips moving together. Do not bend sideways. Bending sideways is painful and stressful to the graft site.

Gently move buttocks to the edge of the bed. Push with your legs as you stand straight up. Do not bend forward.

- **Sitting** - Sit on high chairs with armrests. Low chairs are difficult to get in and out of while keeping your back straight. Do not sit longer than 5 minutes upright or 45 minutes reclined every 2 hours. Avoid chairs with wheels. Always sit with a small roll to support your lumbar curve.



- **Walking** - You will walk with your therapist once or twice a day while in the hospital. Walk as much as you tolerate comfortably. When you go home, begin at the level you could walk in the hospital. After a couple of days at home you should begin to increase your walking distance daily. It is important to pace yourself regarding frequency and distance and the following may help to guide you:

MAXIMUM DISTANCE PER WALK:

- End of Week 1: One block or 10 minutes
- End of Week 2: Two blocks or 15 minutes
- End of week 3: Four blocks or 20 minutes
- End of week 4: Six blocks or 30 minutes

When you return to your surgeon for your first recheck appointment, you should be able to walk about 1/4 mile but no more than 1/2 mile.

- **Toileting:**

- Use a raised commode in the hospital and at home (see hospital discharge on page 7).
- Refer to sitting precautions (see above).
- Do not strain to have a bowel movement.

Push with your legs to stand; avoid bending forward as it puts pressure on your back.

- **Bathroom Sink Activities** - Use a cup to spit into while brushing teeth or brush your teeth in the shower. A washcloth is helpful to bring water up to wash your face and a mirror which comes out from the wall can help for activities such as applying makeup or shaving. Use a straight back and bend your knees at the sink but never lean in for a "closer look".
- **Dressing** - Wear loose fitting clothes and sturdy shoes. Put on shirts in standing while keeping the arms close to the sides of your body. Fasten bras in front, then slide around to the back. Use a reacher or dressing stick to get pants over your feet. Use your sock-aid to put socks on. **DO NOT** reach or twist while getting dressed. Wear elastic laces or slip-on shoes if you do not have help at home to tie your shoes. Your therapists will demonstrate and assist you in proper body mechanics while dressing.
- **Showering** - Keep your back brace on at all times during showering. Use a long-handled sponge to reach your feet and back while maintaining a straight back. Keep arms in close to your body to prevent overreaching and twisting when washing. Keep soap within easy reach - approximately chest height. **DO NOT** bend over to pick up anything off the tub ledge or on the floor. A shower caddy eliminates the need to bend. Use soap on a rope, tie soap in an old nylon stocking to keep from dropping, or use liquid soap. After you get out of the shower, dry your body maintaining good body mechanics. Get back into bed to dry additional areas. Air dry your brace.

DO NOT take a tub bath until cleared by your physician.

- **Kitchen** - Keep lightweight items in the refrigerator at chest height and stand in close to reach them. Keep any dishes/utensils needed to prepare food at counter level where you can easily reach them. Prepare lightweight microwave meals. Keep weight limit at less than 2 pounds

(refer to weight list at end of this packet). Brace abdominal muscles when turning on tap at sink; don't bend. DO NOT load or unload the dishwasher or cook anything in a standard floor oven.

- **Housework** - Light housework is fine to do. Dusting, cooking, ironing, sweeping and laundry are permitted as long as you use good body mechanics and you keep your 2 pound lifting limit in mind. Vacuuming, mopping, windows, mowing the lawn, etc., are considered heavier chores and are to be avoided until you the physician clears you. If you have any questions as to what constitutes light versus heavy work, **CALL YOUR THERAPIST!**
- **Transportation Home:** Raise the car seat height with a pillow. Sit first, then move your legs in simultaneously while bracing your abdominal muscles. Travel in a reclined position with lumbar spine support in your brace. Get out of the car and walk 5 minutes for every 45 minutes of travel. This will alleviate pain from sitting in the same position during your trip.
- **Driving** - You may not drive until your surgeon approves it. You may not drive in any brace. You may ride as a passenger in a reclined position.
- **Sex** - Do not have sex until you see your physician at your 4-6 week post-operative appointment. Talk with your therapist before you leave the hospital if you have questions.
- **Work** - Consult your physician regarding return to work.
- **Pets** - You cannot walk your dog(s) on a leash until cleared by M.D.

Spine Center Appointments

- Make your 4 - 6 week post-operative appointment with your spine surgeon when you go home.
- If a Pain Specialist has seen you in the hospital, make an appointment with the Pain Specialist on the same day as your post-operative appointment. The surgeons do not give triplicate pain medication. These can be obtained from your Pain Specialist at your one month post-operative appointment.

Hospital Discharge

- Your physical therapist will issue any device you need for walking and/or a commode for use at home or make the recommendation for delivery to your home as needed. The occupational therapist will provide the assistive devices you need for dressing and bathing or tell you where they can be purchased.
- Dental work: Always take antibiotics before dental cleaning or dental work. Notify your dentist that you had a fusion or if you have any hardware in your body.

REASONS YOU MUST CALL THE SURGEON:

- CHILLS AND NIGHT SWEATS
- NEW WEAKNESS OR NUMBNESS
- FEVERS
- DIFFICULTY CONTROLLING URINATION OR BOWEL MOVEMENTS
- NEW TENDERNESS AND/OR SWELLING IN THE LEGS

Any concerns/questions regarding exercises or physical activities, please contact your therapist.

LUMBAR SPINE FUSION POST-OP EXERCISES

The following exercises will be taught by your therapist in the hospital after surgery. These are the only exercises you should do until you are instructed otherwise by your doctor or therapist. Do not attempt these exercises until the physical therapist works with you.

1. Incentive Spirometry :

- Blow out as much air as you can.
- Place mouth over end of spirometer and inhale slowly as the blue ball rises.
- Keep the ball within the arrows.
- 10 times, 3 times per day

2. Abdominal Bracing:

- Place fingers under the ribcage near your naval and tighten stomach muscles gently so that fingers are pushed out slightly.
- Practice holding the muscles tight as you breathe normally.
- 10 times, 3 times per day

3. Ankle Pumps:

- Pump your ankles up and down. 10 times every 2 hours

4. Buttocks Squeeze:

- Pinch buttocks together without arching the back.
- Hold for 5 seconds and relax.
- 10 times, 3 times per day

5. Thigh Squeeze:

- Place a towel roll or pillow under the knee.
- Tighten the thigh as your lift your heel off the bed.
- Hold for 5 seconds and relax.
- 10 times, 3 times per day

6. Mini-squats:

- Stand with your back against a wall, feet shoulder width apart and turned outward slightly.
- Slide down the wall about 2-4 inches keeping your back straight.
- Push with your legs and buttocks and return to standing.
- Do 10 times, 3 times per day.

DO YOU KNOW THE WEIGHTS OF SOME COMMON OBJECTS?

ATTACHE CASE (HALF FULL)	5 LBS.
BAG OF GROCERIES (LIGHT)	5-6 LBS.
BAG OF GROCERIES (MEDIUM)	9-10 LBS.
4 CHINA PLATES	4.5 LBS.
CHINA COFFEE CUP	0.5 LBS.
2 CHINA SOUP BOWLS	1.5 LBS.
FULL MR. COFFEE CARAFE	4.4 LBS.
GALLON OF ICE CREAM	2 LBS.
S.F. YELLOW PAGES A-L	2.8 LBS.
MEDIUM GLASS MIXING BOWL	2.0 LBS.
DESK TELEPHONE	2.4 LBS.
LARGE CAN OF TOMATO JUICE	3.2 LBS.
1/2 GALLON OF MILK	4.2 LBS.
STEP STOOL	6.1 LBS.
2 SHEETS, 2 PILLOW CASES (DOUBLE BED)	3.2 LBS.

**** POST ON YOUR REFRIGERATOR FOR YOUR REFERENCE ****