SPINECARE
MEDICAL GROUP

General Pre-Operative Information (Outpatient)

Preparing for spine surgery takes a great deal of physical, mental, and emotional preparation to enhance success and speed recovery time. We are here to support you in every way possible. As you assess your goals and expectations, keep in mind an extremely important point: you have a significant role in the recovery process and can positively impact how soon your back gets better.

Continuing to master and practice good body mechanics will be of utmost importance to maintain a healthy back and neck. It is helpful to understand and practice a neutral spine position (no excessive bending or rotation) during your recovery and beyond. If you have lumbar (low back) surgery, use your abdominal muscles for bracing. For those undergoing cervical (neck) surgery practice keeping your head and neck neutral, avoiding prolonged or excessive bending or twisting positions.

Surgery itself can be painful if you "bend your back," but you can minimize pain by using proper body mechanics when you are ready to get up and moving again. The more you perfect your body mechanics before surgery, the easier it will be for you as you recover. Remember to change positions every 30 minutes or so to avoid fatigue.

Strength is another important component to recovery. Because you lose strength from staying in bed, undergoing general anesthesia and taking medications, it is crucial to be strong before surgery. The stronger you are before surgery, the more capable you will be to tolerate pain, change position, walk more easily and progress with your rehabilitation.

Blood Donations and Transfusions for Surgery

Most patients who have spine surgery do not lose enough blood to require blood transfusions. Sometimes, situations arise during surgery or the hospitalization that are unpredictable and you may become anemic. This may require a transfusion which was not anticipated. Fortunately, this is a rare occurrence. If your surgeon anticipates that you may need to a blood transfusion you will probably have already started the process of donating and banking blood.

Types of Blood Transfusions

- Autologous Blood
  When you donate your own blood and it is given back to you, it is called Autologous Blood. You can donate units of autologous blood at a licensed blood bank, usually at weekly intervals, one unit at a time. If you are anemic or an unsuitable candidate for other medical reasons, you may need to use designated donor blood or banked blood. After donation, the blood bank takes full responsibility for its transportation to the hospital.

- Designated Donor Blood
  Some people are not able to donate enough blood because of health issues. In that case, you may have family or friends with a compatible blood type donate for you. This is called designated donor blood. As Designated Donor blood is not your own, it carries the same risks as Banked Blood and takes as much time to process as autologous blood.

- Banked Blood
  Modern blood banking techniques have made receiving banked blood very safe, but there is a small risk of infection or a transfusion reaction. If you have a greater than expected blood loss, your surgeon may feel the benefits of giving you banked blood outweighs the risks. It is important to know that if autologous or designated donor blood is not available for any reason at the time of surgery, banked blood will be used in case of an emergency.

Procedure for donating blood

SpineCare Medical Group's surgery scheduler will fax a doctor's order to the blood bank and the blood bank will then contact you regarding appointments. Your physician will tell you how many units of blood will be required.

Planning before Surgery

PACU

After surgery, you will be taken to the PACU (Post Anesthesia Care Unit). There you will awaken from anesthesia and be monitored. Your pain will be treated and any post-operative orders carried out. This usually takes 30-60 minutes. Once the nurse has determined you are stable and safe to go home, the person taking you home will asked to bring their car into the patient pick-up spot. You are escorted to the car by one of the PACU staff.

You will most likely not feel "ready" to go home. However, the PACU is where you recover from anesthesia; home is where you recover from surgery. Many people feel rushed out of the PACU because they believe that they should be able to stay until they feel more awake. Feeling sleepy and dizzy is normal after anesthesia. Some nausea is also not unusual and will be treated, but may not be completely resolved before discharge.

Incision Care

After surgery you will have a dressing placed over your incision. It is normal to have some blood staining, but it should not be excessive or soaking the bandage. Your caregiver may change the bandage as needed, usually after the first 2-3 days. Simply replace it with a fresh, dry gauze dressing and secure with tape. Do not use creams or ointments in the incision during the first 4 weeks. You will be given an instruction sheet in the PACU with more specifics.

Ice

After back surgery, use ice on your back every 2 hours as needed for the first 48 hours after surgery. Ice is not as useful after neck surgery, but can be used if desired.

Pre-Operative Checklists

Preparing for spine surgery is a physical, mental and emotional process. There are many important matters which you will probably need to attend to before your surgery. Allowing yourself ample time to get these tasks done helps to reduce the stress and worry which are common before surgery. We encourage you to put this checklist on your fridge to help you remember everything.

Personal Matters

1. The following personal matters in my life are in order:
    - ___ Bills / correspondence
    - ___ Banking
    - ___ Insurance Responsibilities
    - ___ Help at home after surgery
    - ___ Childcare
    - ___ Hair-care
    - ___ Pet care
    - ___ Meals (planned / prepared / frozen)
    - ___ Instructions to my family / house sitter
    - ___ Transportation arranged to and from hospital
    - ___ Home arranged for maximum ease after surgery

Medical Matters

1. ___ I am not to eat or drink anything after midnight the night prior to surgery.
2. ___ I have read and understand the "Informed Consent" form.
3. ___ I am not aware of any new illnesses since my last appointment.

Medications and Social Habits

1. ____ **No** cigarette smoking for 30 days. If you are having a fusions surgery, do not use any nicotine products (including chew, dip, patch and gum) for 3 months after surgery or until cleared by your surgeon.
2. ____ **No** alcohol consumption for 2 weeks.
3. ____ **No** anti-inflammatory medications for 1 week. This includes Aspirin, Alka-Seltzer, Bufferin, Anacin, Ibuprofen (Advil), Naproxen (Aleve), Relafen, DayPro, Mobic, Celebrex, among others. If in doubt, ask your doctor. These drugs may increase the risk of excess bleeding. If you are having a fusion surgery, do not take these medications for 3 months after surgery or until cleared by your doctor.
4. ____ **No** anticoagulants (Coumadin / Plavix) for seven days. Your surgeon will restart these after surgery.
5. ____ **No** birth control pills and hormone pills (Premarin / Provera) for one month. These medications may increase the risk of blood clots. You may restart once you are up and around on your feet after surgery.

Frequently Asked Questions

Will I have pain after surgery?
You will almost certainly have some pain after surgery, but you should be reasonably comfortable by using your pain medications and good body mechanics. Pain medications will not eliminate your pain. Occasionally, pain can be upsetting but does not always mean there is a problem with the surgery. Our doctors try to fight the pain very aggressively with medications but occasionally this need adjusting after discharge from the hospital. If you are having severe pain after surgery, please contact SpineCare at 650-985-7500.

As you heal the pain will improve. As you become more physically active though, your pain may increase. Therefore, pain control is a balance between healing, activity and medications. We recommend you follow the 5% rule. If you increase your activities 5% during the day we would expect that you feel more pain at the end of the day. You should recover overnight and hopefully feel well in the morning. If you recover as expected, you can increase your next day's activities by 5%. If you do not recover overnight (pain remains higher than expected), we suggest that you rest one day and decrease your total day's activities by 5% until you feel good the next morning. Continue the process as tolerated.

If my pain is not controlled by oral medication, can it be changed or increased?
Yes. Your doctor will give you some guidelines how to do this. However, you should call your doctor for advice before increasing your pain medications beyond the instructions on the prescription.

Will I wear a body jacket or corset?
We use braces much less frequently as the instrumentation used at surgery is very strong. Occasionally, patients need a brace but your surgeon will make that decision. Corsets are usually not necessary either (as they don't provide much support) but patients sometimes feel secure in the wrap. Ask you physician if you have a concern.

What if I have difficulties or problems once I get home?
Always remember to review your activities to determine if you may have simply over-extended yourself with activities. Ask yourself, "was I maintaining a neutral position at all times and were my body mechanics perfect?" If you do have problems, call the SpineCare office and someone will get back to you promptly. Be sure to call if you develop a fever, drainage from your incision, or swelling or redness around the incision.

How long after I go home from the surgery center will I see my physician?
It depends upon the type of surgery you had; some patients with simple surgeries will be seen in two weeks so they can increase activities or be released to work. Most often,

patients who have fusions will be seen about one month after discharge from the hospital. We try to schedule your first appointment before you leave the hospital.

When will I have my sutures taken out?
Visible skin sutures are rarely used. The skin is usually held together by a hidden layer of dissolving sutures so there is rarely a need to take out sutures. Some patients have skin staples in place. They may be removed before you leave the hospital, but if they need to stay in longer your doctor will make arrangements to have them removed, usually at 7-10 days after surgery. Steri-strips are small bandages on the skin that hold the edges of your incision together. These usually come off by themselves but you can remove them safely after 2 weeks.

How do I know if I have an infection?
Spine surgery infections are rare but may still occur even with good sterile technique and antibiotics. The most common symptoms of an infection include a dramatic increase in pain, swelling, redness or drainage from you surgery incision. If you have any concerns that your incision may be infected, contact us immediately at 650-985-7524.

How long will it take to heal from surgery involving the removal of a herniated disc?
The incision and muscles heal quickly with the incision usually closed by 2 weeks and healed by 4 weeks. The muscles may be swollen, stiff, and painful for 6-8 weeks.
The disc herniation (and microdiscectomy surgery) leaves a small opening in the annulus (outer layer of the disc) through which a portion of the nucleus (inner layer) was removed. This opening will seal itself while gradually strengthening over 2-6 months.

How long will it take for my fusion to heal?
Lumbar (low back) fusions take an average of six to twelve months to become solid. Cervical (neck) fusions are usually healed by 3-6 months. Not surprisingly, different patients heal at different rates. Younger, healthier people might heal their fusions more quickly than older individuals with medical problems. Activity, especially walking, seems to help fusions heal more rapidly and with better strength. Unless specifically directed by your surgeon, bed rest after surgery is not advised. Get up and around using pain as your guide.

How do we know the fusion is complete?
Your physician determines the status by assessing your x-rays, but occasionally we may need to perform a CT scan. Please remember, we are most concerned with how you feel, not the status of your fusion. Some patients never get a solid fusion, but they feel well. Occasionally, a fusion appears solid, but the patient does not feel better.

What if I have to use the bathroom?

Constipation early on after surgery is very common and quite frustrating for patients and their caregivers. Bowels are sluggish due to general anesthesia and pain medications. Usually, however, by the time you are ready to have a bowel movement you are up and able to get to the bathroom on your own or with assistance. By keeping your abdominal muscles tight and using your leg muscles to get up and down from the toilet, you will protect your spine.

After you get home treat constipation aggressively. Use stool softeners, fiber supplements, fruit juices and any medications your doctors have prescribed to assist with this. Narcotic pain medications are the leading cause of constipation after surgery so try to reduce your intake as quickly as possible.

I've heard that I have to stay flat in bed after surgery. Is this true?

The only time your surgeon may recommend remaining flat in bed is if there is some leak of spinal fluid and a repair has been completed. This position allows for the repair to seal before getting you up and around. Luckily this is very rare and typically is a short term (24-48 hour) requirement.

In general, you can have your head up immediately upon return the PACU. Remember though, don't bend your back. When the bed is flat, you can lie on your side with your knees drawn up, a pillow between your knees and another pillow under your head, or on your back with your knees bent.

How do I turn in bed and get out of bed?

You will find log-rolling to be the most helpful technique to turn in bed. This will be taught preoperatively. Use abdominal bracing and move your shoulders and hips at the same time as you roll over from your back to your side or side to your back. The goal is to avoid twisting the spine. Move your body as one unit.

When you get out of bed use the log-rolling technique as well. Log-roll to your side. Slightly bend your knees and hips and push up with your elbow and opposite hand, keeping the stomach muscles tight and simultaneously letting your legs slide over the edge of the bed. Gently move your buttocks to the edge of the bed. Push off of the bed with the hands and raise straight up from your legs to stand. Avoid bending your back. If you are admitted to the hospital, the physical therapist will teach you how to get out of bed properly

How long can I sit?

You may sit in a recliner in a reclined position as long as you would like unless it increases your pain. Most patients find 20 minutes to be a common limit before they feel the need to change positions. Begin sitting in a straight chair four to six times per day for short periods of time—five to fifteen minutes. Do not slump or slouch. Gradually increase your sitting tolerance. Maintain your neutral position during sitting.

You may wish to use a lumbar roll for comfort. Simply rolling up a towel and placing it behind your lower back may be all that you need to be comfortable. Learning to bend from the hips and use your elbows on the table to support yourself will usually allow you to eat a meal comfortably at a dining room table. When getting up from a chair, keep your abdomen braced and use your legs to raise yourself. You will be getting stronger each time you get up and down.

Can I shower and take a tub bath?

Generally after 2-3 days you will be permitted to shower. In terms of your incision, do not let the water run directly on the incision site and replace the incision with a clean bandage once you are done. You are advised against taking a bath until the incisions have scabbed over and healed or if you have received permission from your surgeon.

How much can I walk?

Once home, taking short walks for ten minutes or so in your house every few hours is advised. When you tolerate these short walks, you can take longer walks outside. Use the 5% rule to increase the duration of your walking. If you increase your walking 5% during the day we would expect that you feel more pain at the end of the day. You should recover overnight and hopefully feel well in the morning. If you recover as expected, you can increase your next day's walk by 5%. If you do not recover overnight (pain remains higher than expected), we suggest that you rest one day and decrease your total day's activities by 5% until you feel good the next morning. Continue the process as tolerated. It is better to do frequent short walks than one long walk that increases your pain or tires you out excessively. Flat surfaces are better than hills.

When can I resume my exercises?

Unless you have been given approval by your physicians, do not resume any exercises other than walking until you have your follow-up visit with your surgeon and get further instruction.

What about driving?

Driving is not as easy as simple sitting. Most surgeons recommend avoiding car travel for 2-4 weeks after surgery unless it is essential, such as travel from the hospital or to a doctor's appointment. We advise that you refrain from driving a car yourself until you have seen your doctor for your first postoperative visit. When you do drive yourself for the first time, go with someone else in case your pain gets worse. If your pain medications are causing you any sleepiness or dizziness, you should not drive.

When can I have sex?

Let pain be your guide and try to limit spinal motion. While there is no exact timeframe, we find most patients do not feel comfortable attempting sexual activity for a few weeks

after low back surgery and some take longer. If you can walk a mile without an increase in pain, chances are you have enough strength and ability to control pelvic motion during sexual intercourse. Be willing to try positions that limit pelvic motion if this is painful. It may also be helpful if your partner assumes the more active role. Generally, however, side-lying positions are easier to control pelvic motion.

When can I return to work?

Depending on the individual, some patients can return to light work in about two weeks with a gradual increase as tolerated. Those with more strenuous jobs (including prolonged sitting) may require more time.