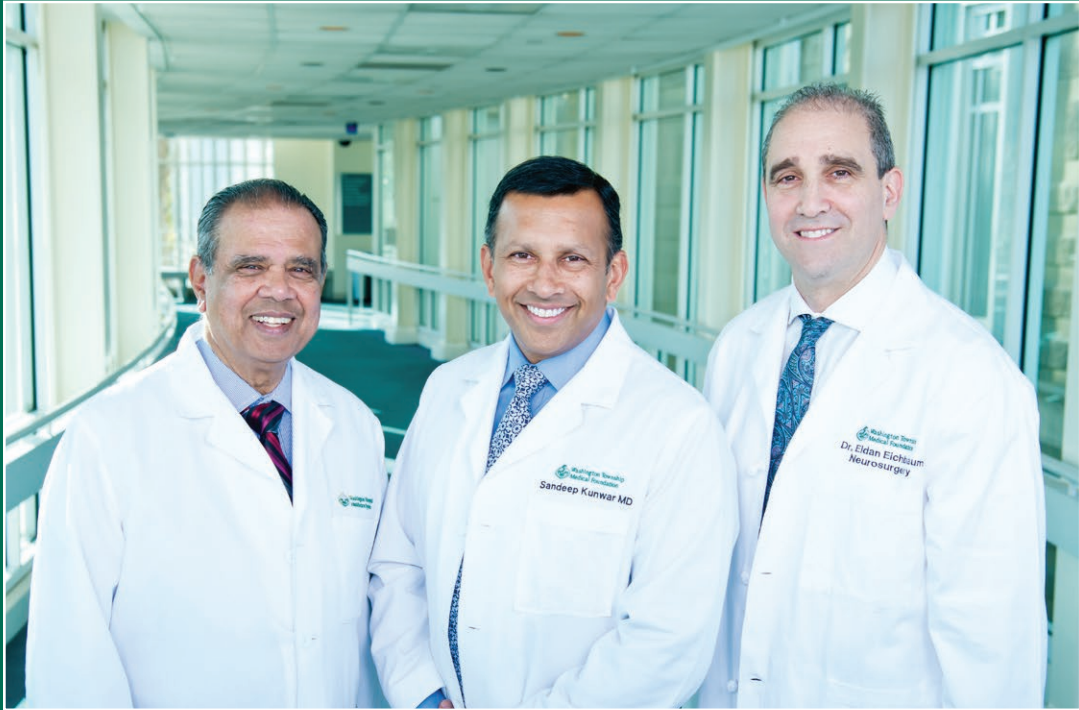


Thoracic & Lumbar Spine Information

Education For Your Upcoming Surgery



Washington Hospital
Healthcare System

2000 Mowry Ave., Fremont, CA 94538-1716
(510) 797-1111 | www.whhs.com



This binder is to provide you with information about the process of preparing for your upcoming surgery, hospital stay, rehabilitation and recovery.

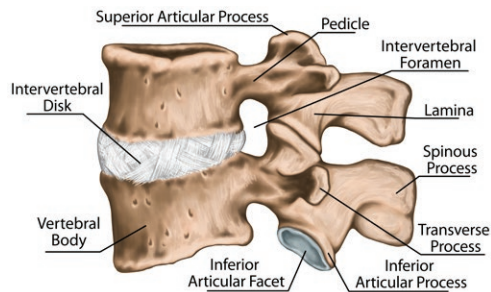
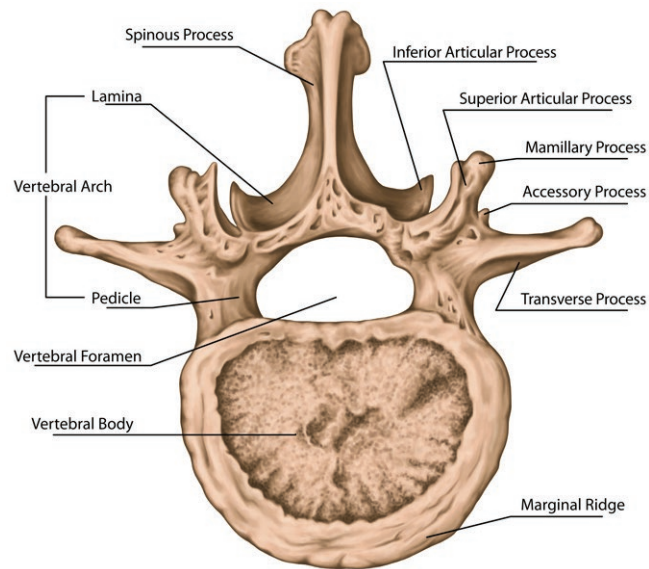
You will learn:

- Anatomy and posture
- Pre-surgery tasks
 - Items for the surgeon
 - Home preparation
 - Exercises
- Surgical procedures
- Precautions
- Positioning
- Equipment
- Discharge from the hospital
- Activity and post-op exercise



ANATOMY

You should understand the anatomy of your spine to know how to protect it after surgery. The spine is meant to provide an anchor for the muscles, protect the nervous tissue and stabilize the rest of the body. Your spine is made up of individual vertebrae. Each vertebra interacts with the next one above or below to create an opening in which a nerve from the spinal cord will pass through. Nerves go out and insert into muscles and these carry the messages of movement and sensation to and from the brain.

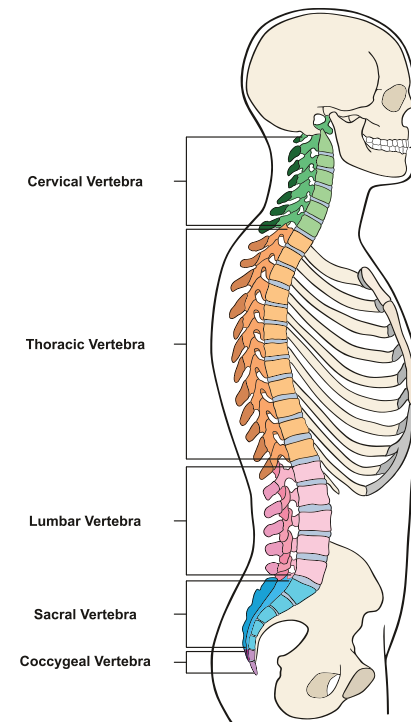


You have three layers of muscles in the back and they all work to support the spine:

1. Superficial – those you can see under the skin
2. Intermediate – these help to provide flexibility and strength
3. Deep – these provide stability and structure

Anytime you start to move your arms and legs, these muscles tighten to keep the body still. The deep muscles stabilize the rest of the spine. When you lift your leg, the muscles work to stabilize the back so that you can lift your leg. When you bend over, they stabilize the legs so you can move your trunk.

Even surrounding muscles in the upper back and neck provide stability to the cervical spine and head.

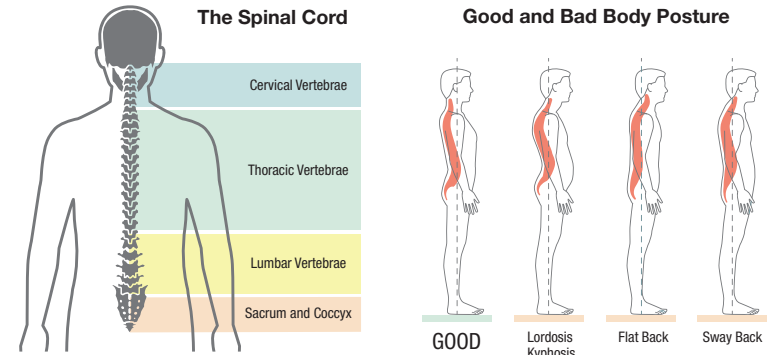
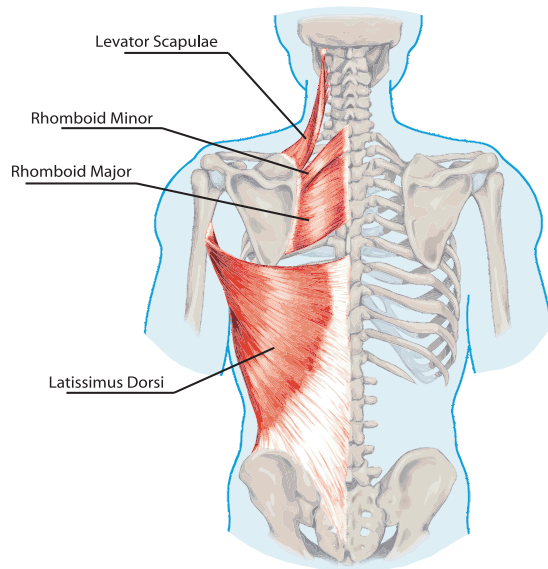
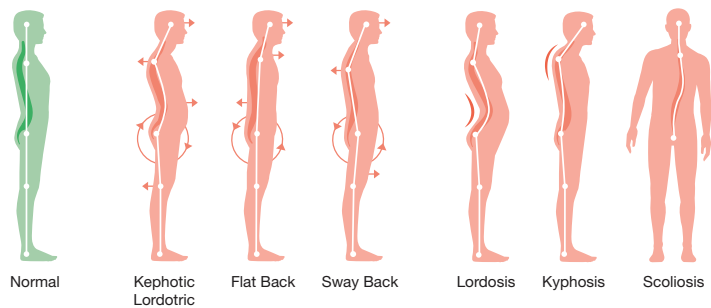


POSTURE

Maintaining good posture is a product of good muscle balance. We want our bodies to have the right amount of muscle strength to support our limbs and our upright position – NEUTRAL SPINE.

Below are examples of posture problems:

Common Postural Problems

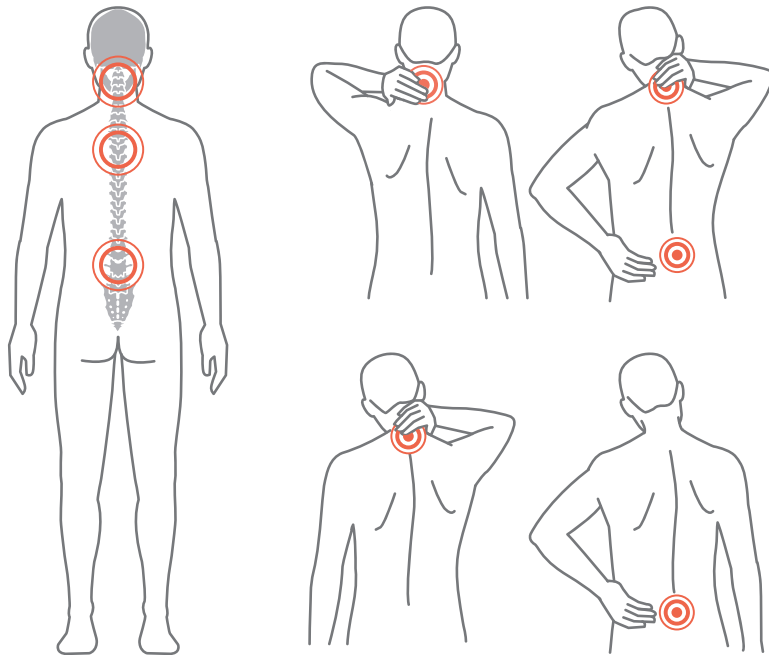


Back pain can be caused by the following issues¹:

Herniated Disc	Discs that protrude from between the vertebrae and may touch or compress the nerves
Degenerative Disc Disease	Breakdown of the disc material, decreasing the space between the vertebrae
Spondylolisthesis	Slippage of the vertebra
Spinal Stenosis	Narrowing of the spinal canal, where the spinal cord and nerves pass
Osteoarthritis	Wear of the bone and discs over time, causing decreased space around nerves, due to disc or bone spurs

¹www.spinal-health.com

Moving and lifting incorrectly, traumatic events like falls or accidents, or wear and tear over time can all lead to pain with the spine. When a patient has muscle imbalance, it contributes to poor posture and body mechanics. Weak muscles in the spine and hips can pull the spine into incorrect positions, causing increased back and nerve pain. Abdominal muscles are also important in spine alignment and balance, since they provide anterior support to the spinal column.



Symptoms:

- Pain in your lower back
- Hamstring spasms
- Pain may spread down leg to foot
- Foot numbness, tingling
- Leg numbness, tingling
- Weakness of legs

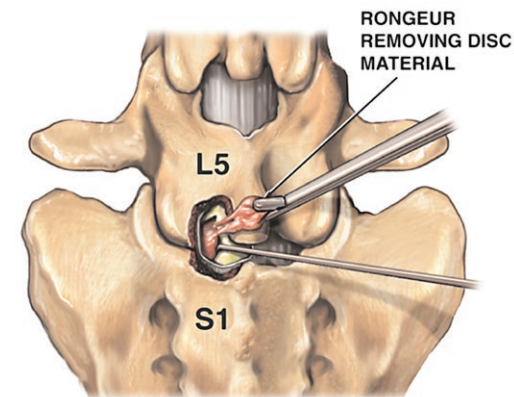
SURGERY TYPES

There are different types of spine operations our surgeons perform at Washington Hospital Healthcare System. They can involve the cervical (neck), thoracic (chest) or lumbar (low back) areas. Your surgeon will discuss your specific procedure with you.

1. SPINAL DECOMPRESSION PROCEDURES

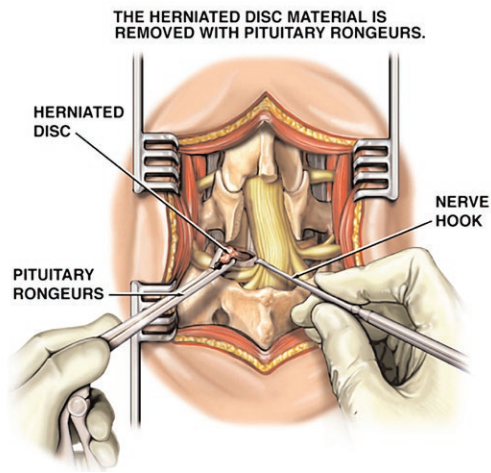
These surgeries involve creating space for nerves and discs to decrease nerve compression. This is usually done when a patient has disc herniation or degeneration of the vertebral bone/disc interface, which can lead to bone spurs, loss of vertebral height and/or overgrowth of the specific ligaments.

- a. Laminotomy/foraminotomy – Shaving off part of the lamina to create a larger opening to relieve the compressed nerve

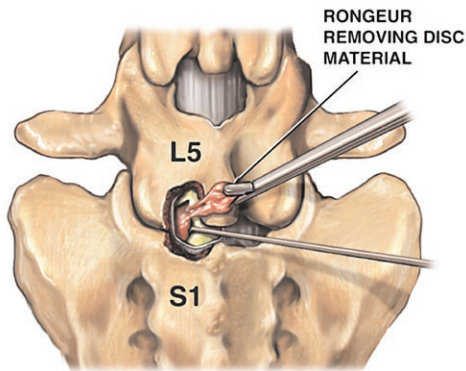


THE L5-S1 DISC MATERIAL IS REMOVED FREEING THE NEURAL ELEMENTS

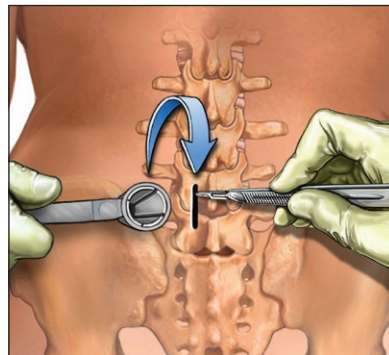
b. Laminectomy – Complete removal of the lamina



c. Discectomy – Removal of part of a disc that is compressing a nerve



THE L5-S1 DISC MATERIAL IS REMOVED FREEING THE NEURAL ELEMENTS

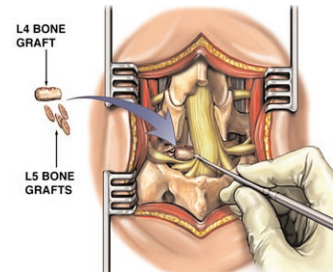


Surgery is performed through a tube

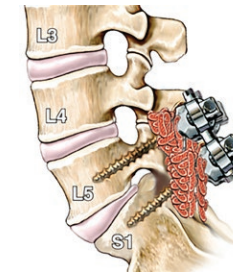
2. SPINAL FUSION

This type of surgery involves correction of vertebral instability, severely degenerated discs, eliminating motion of the levels involved, relieving back pain. This may be done with or without disc removal. This helps to prevent pressure on nerves in the back as well.

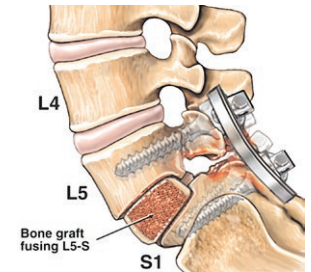
1. Open Posterior Intervertebral Fusion



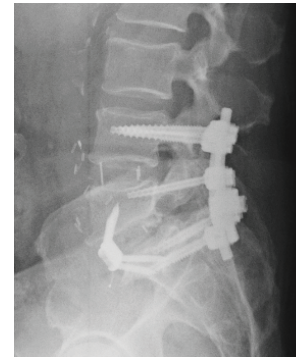
2. Posterior Lateral Fusion



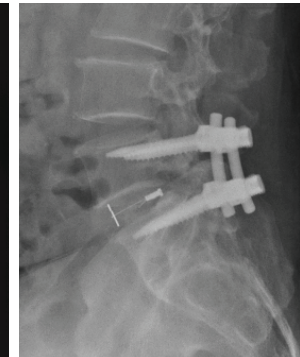
3. Anterior Intervertebral Fusion



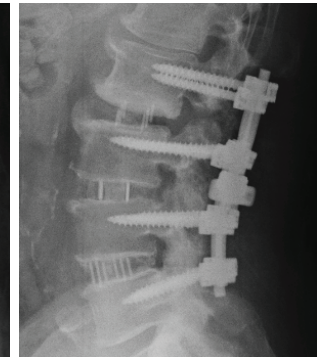
Surgical approaches include:



Anterior and Posterior Fusion (ALIF)



Transforaminal or Posterior Intervertebral Fusion (TLIF or PLIF)



Extreme Lateral Intervertebral Fusion (LLIF)

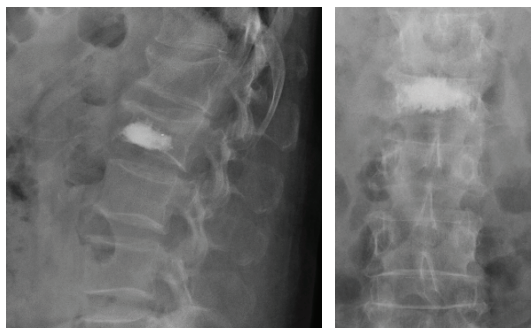
Lumbar Spine Fusion Surgery

Posterolateral Fusion	Interbody Fusion	360-Degree Fusion
The graft is placed between transverse processes and facet joints in the back of the spine. Most common instrumentation is pedicle screw fixation that connects vertebrae with screws and rods.	The disc is removed and a cage and graft is placed between vertebral bodies. The graft may be placed through an incision in the abdomen (anterior approach), the side of the abdomen (lateral approach), or through the back (posterior approach).	Combines both posterolateral fusion (PLF) and anterior lumbar interbody fusion (ALIF).

All of these procedures may be performed via a minimally invasive approach.

3. VERTEBRAL BODY AUGMENTATION

This is a minimally invasive treatment to repair spinal fractures caused by osteoporosis, cancer or benign lesions. A space is fashioned using an expandable device which creates a pocket inside the vertebra. Then bone cement is used to fill the space for stability and pain relief.



PREPARATION FOR SURGERY

CONTACT YOUR INSURANCE COMPANY

Before surgery, you should find out your portion of financial responsibility for surgery, if any, to clarify what is covered. The surgeon's office will be contacting your insurance company for preauthorization as well.

PRE-OPERATIVE TESTING

A pre-op testing appointment will be made by your surgeon's office, scheduling it for a week day between 8:30 a.m. and 4 p.m.

Your physician will order some testing to be done prior to your surgery. Tests may include lab, EKG, X-rays or other imaging procedures. To ensure that the results of your tests are available prior to your surgery, we recommend that your tests be done here in the pre-op testing office at Washington Hospital, 2500 Mowry Ave., call **(510) 818-6632**.

If your tests are not done here, please arrange to have the results faxed to Pre-op Testing Department:

Fax # (510) 745-6410.

You may spend 30 minutes to one hour in the pre-op testing area depending on the amount of testing your physician has ordered. You will also be asked to sign a surgical/procedure consent form agreed upon by you and your surgeon.

During your visit you will be weighed and have vital signs taken (blood pressure, pulse, temperature). Wear comfortable clothing as you will be asked to partially change if X-rays and/or EKG are requested by your doctor. You will be in contact

with an anesthesiologist the evening before your procedure. **You will be instructed on some activities to perform the night before your surgery during this visit.**

Stop any blood thinner medications 10 days prior to surgery (including vitamin E). You need to consult your physician for appropriate guidance and to see if additional medications will be needed.

You CANNOT eat or drink anything after midnight, including water and chewing gum. However, you may be instructed by your anesthesiologist or surgeon to take some morning medications with a small sip of water. You will be advised of this during the pre-op visit.

REVIEW “EXERCISE YOUR RIGHT”

It is the policy of Washington Hospital Healthcare System to place patients’ wishes and individual considerations at the forefront of their care, and to respect and uphold those wishes.

ADVANCE MEDICAL DIRECTIVES

Advance directives are a means of communicating to all caregivers the patients’ wishes regarding health care. If a patient has a living will or has appointed a health care agent, and is no longer able to express his or her wishes to the physician, family or hospital staff, Washington Hospital Healthcare System is committed to honoring the wishes of the patient as they are documented at the time the patient was able to make that determination.

HOUSEHOLD PREPARATION

Your family and friends should help with tasks around the home. The patient should focus on their recovery!

ALL AREAS

- Remove small, loose throw rugs. Cover slippery surfaces with carpets that are firmly anchored to the floor with no edges to trip over.
- Be aware of all floor hazards such as pets, small objects, furniture corners or uneven surfaces.
- Provide good lighting throughout your home. Leave a light on at night in the bathroom.
- Keep extension cords and telephone cords out of pathways.
- Avoid shoes without lips or backs. They tend to cause slips and falls.
- Sit in chairs with arms. It makes it easier to get up. Use dining room chairs or patio chairs if you do not have arm chairs.
- Rise slowly from either a sitting or lying position so you do not get lightheaded.
- Do not do any heavy lifting of more than 10 to 15 pounds for the first six weeks and then get permission from your surgeon regarding lifting limitations.
- Stop and think. Use good judgment.

KITCHEN

- Plan ahead! Gather all your cooking supplies at one time. This cuts down on excessive trips to the refrigerator, cupboards, etc. If needed, sit to prepare your meal.
- Place cooking supplies and utensils in a convenient position so they can be obtained without too much bending over or stretching.

- Raise the height of your chair by putting cushions on the seat or using a high stool when working at kitchen counters.
- Do NOT get down on your knees to scrub floors. Use a mop and long handled brushes.

BATHROOM

- You may need to keep your incision dry for two weeks after surgery. An occlusive dressing will be required for showers and will be provided before hospital discharge.
- ALWAYS use non-slip adhesive or rubber mats in the tub or shower.
- Attach soap on a rope so it is within easy reach and to avoid dropping. You can also place soap in a panty hose leg.
- A shower chair or bench is helpful to use for stability.
- No taking baths for at least three to four weeks.

EXERCISE BEFORE SURGERY

START PRE-OPERATIVE EXERCISES

Many patients with back pain and pressure on the spinal nerves become very weak. This interferes with their recovery. **It is important that you begin an exercise program before surgery. You do not have to do ones that increase or cause severe pain. This is just to make you familiar with your post-surgery routine.**

It is important to be as fit as possible before undergoing spine surgery. This will make your recovery much faster. Walking is the most important type of exercise that you can do to

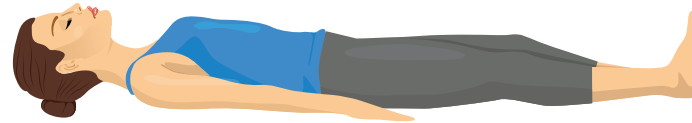
increase your endurance. There are also five exercises shown below that you should start doing now and continue until your surgery. You should be able to do them in 10 to 15 minutes, and it is recommended that you do all of them twice a day. It is not harmful for you to do more. Consider this as a minimum amount of exercise prior to your surgery.

If any of these exercises increase your pain, do not do them. We will work with you after surgery to slowly improve your strength.

GLUTEAL SETS

Strengthening your buttocks

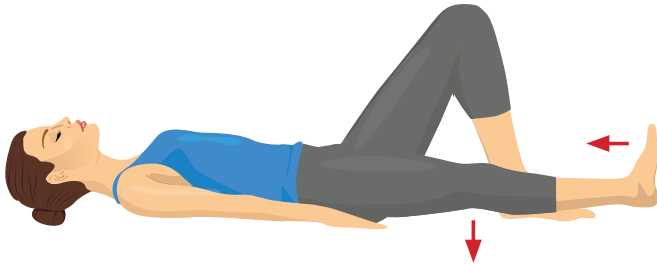
- Lie on couch or bed. Squeeze your bottom together.
- Do not hold breath. Hold for 10 seconds.
- Relax. Repeat 10 to 20 times.



QUAD SETS

Strengthening your thighs

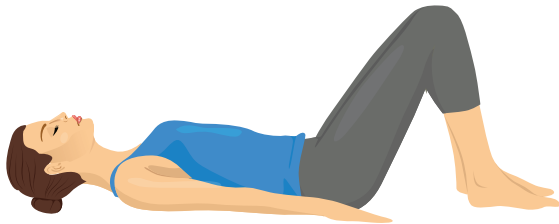
- Lie on couch or bed on your back.
- Press your knee into the couch or bed.
- Hold for 10 seconds.
- Relax. Repeat 10 to 20 times.



ABDOMINAL ISOMETRICS

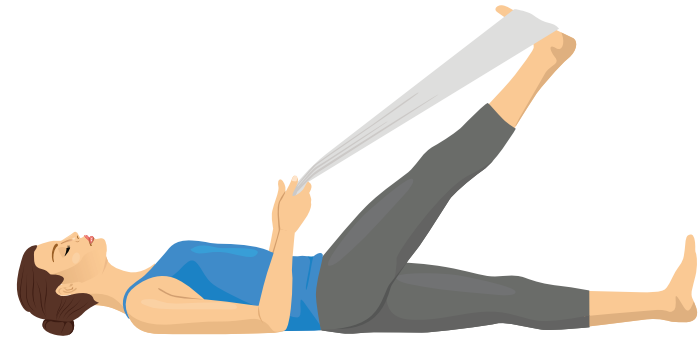
Strengthening your abdominal muscles

- Lie on firm couch or bed on your back.
- Squeeze in your stomach and count out loud to five.
- Push stomach out and count out loud to five.
- Repeat 10 to 20 times.



HAMSTRING STRETCH

- Lie on your back with your legs straight out in front of you.
- Loop a sheet, long piece of fabric, or soft cord around one foot.
- Grasp both ends in one hand. Place your other hand flat against your knee.
- Using the loop, pull your leg up into the air. Keep your hand against your knee to keep your knee straight.
- Continue to pull the loop (and your foot) toward your head until your leg resists. Keep firm pressure on your knee and keep it completely straight. Do not allow your leg to fall or your knee to bend.
- Repeat with the other leg.

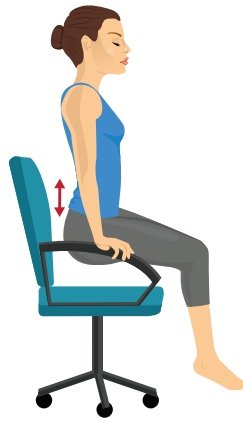


CHAIR PUSHUPS

Strengthening your arms

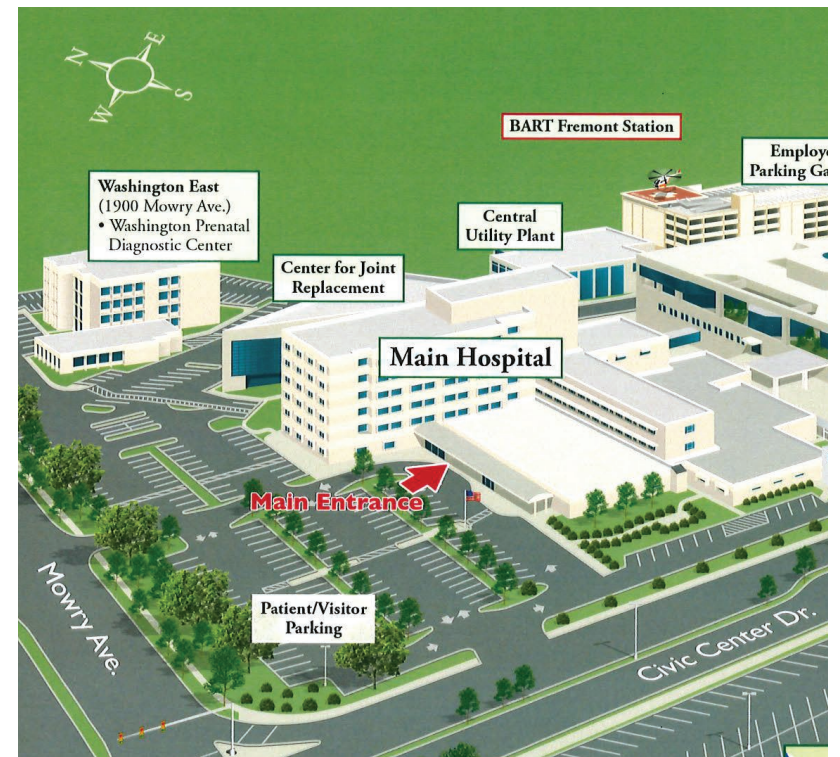
This exercise will help strengthen your arms for getting in and out of bed, and walking with a walker.

- Sit in an armchair. Place hands on armrests.
- Straighten arms, raising bottom up if possible.
- Repeat 10 to 20 times.



WHAT TO EXPECT ARRIVAL

When arriving at the Hospital, complementary valet services are available Monday to Friday, 8 a.m. to 8 p.m., in front of the main Hospital entrance, located at 2000 Mowry Ave. Self-service patient and visitor parking is available in front of the Hospital and also across Civic Center Drive at 2500 Mowry Ave., in front of Washington West.



TOBACCO-FREE, SMOKE-FREE CAMPUS

The entire Washington Hospital campus (including parking lots) is tobacco- and smoke/vape-free zones. The use of any tobacco products -- smoking, vaping or chewing of tobacco, or any other substance such as marijuana cigarettes, e-cigarettes, pipes, and cigars -- by patients, family or visitors while on the Hospital's campus is strictly prohibited.

CHECKING-IN

Upon arrival, you and your guests will be greeted at the door by a security officer, who will conduct an inspection of all personal items (backpacks, purses, totes, etc.). Following this, proceed to the welcome desk in the Hospital main lobby where you and your guests will be asked to present a valid form of identification. The concierge or security officer will then take a photo of you and your guest(s), which will be printed onto identification badges. ID badges should be visible and worn by guests at all times while in the Hospital, and should be returned upon leaving.

After checking in, you will be escorted to admitting, where you will receive a packet with your admitting paperwork.

HOSPITAL STAY

The goals during your hospital stay are to manage your pain with medications, teach you to be mobile and to prepare you for discharge home to continue your recovery.

INCENTIVE SPIROMETER

You will receive this in the hospital to use after surgery. You need to use this device to breathe deeply to open your lungs. This improves oxygenation and decreases low-grade temperatures.

1. Hold device in your hand.
2. You should adjust the yellow slider to between 1500 and 2500.
3. Place mouthpiece in mouth after you exhale.
4. You are supposed to INHALE on the mouthpiece, SLOWLY and DEEPLY.
5. Inhale as long as you can until the lungs are full. Remove mouthpiece and exhale.

Repeat 5 to 10 times EACH hour when you are in the hospital.



PAIN MANAGEMENT

Pain after surgery is different than before surgery. You may experience “muscle spasms” when trying to move. This grabbing sensation causes pain and sudden jolts of pain can make it difficult to move. It may feel more comfortable to hold the spine in a less than upright posture to have less pain. The goal is always to achieve upright posture and better trunk stabilization.

POST OPERATIVE PAIN EXPECTATIONS

You will most likely rate your post operative pain as severe. This typically lasts for 3 days. If you have used opioids long-term it will be more difficult to control your post operative pain. Long term usage of opioids alters pain perception which complicates post operative pain management.

ICE

Ice is helpful to decrease spasms and swelling. Flat ice packs are more comfortable for patients to lie on or apply to the neck and shoulders.

Use ice 20 to 30 minutes, three times per day and wait 60 minutes between icing sessions.

- Ice in a resealable bag
- Gel packs
- Frozen peas

POSITIONING

Learning positions of comfort are important. Changing positions frequently is helpful and also helps the muscles to relax. The staff will work with you to teach you how to roll and move safely in bed, to get to/from the bathroom and to use pillows for support.

PAIN MEDICINE

We will be managing your pain with a combination of medications during and after your surgery, given either through your IV or by mouth. Medications in combination with movement help decrease pain and spasms. The goal is to figure out which ones work the best.

The surgeons typically take care of postoperative pain management for the first 3 to 6 months after surgery. If pain medication is necessary after that time, it is best to transition to your primary care physician or a pain management specialist.

PHYSICAL THERAPY (PT)

This will be a large portion of your recovery. In the hospital, you will learn techniques to move safely, to get comfortable and to increase your endurance for home. The PTs will evaluate and treat you for physical function and pain post-operatively, giving you guidance on maximizing ability and following your recovery safely. You will need to heal from the surgery (about 6 to 12 weeks) before starting outpatient PT.

They will focus on:

- Bed mobility
- Transfers
- Gait
- Assistive devices
- Indoor environment
- Outdoor environment
- Safety
- Up/down stairs
- Exercise program

They will work with you on:

- Patient education/precautions
- Brace application (if applicable)
- Symptom management/modalities
- Body awareness and positioning
- Stabilization
- Functional movement training
- Exercise program for neuromuscular activation

STAIRS

The PTs will take you on stairs once you can safely walk for distance. This is important to your safety, regardless of whether you have stairs at home.

ASSISTIVE DEVICES

The rehab team and the case manager will determine if you need an assistive device for home after your surgery and how to obtain it. The device may or may not be covered by your insurance. If it is not covered, you may need to pay for the device(s) yourself. You may also choose to get equipment on your own from community resources.

- Walkers with two wheels or four wheels provide support
- Adjustable canes and crutches are helpful on stairs, provide light support for balance and are a visual cue to others that you are not steady
- Raised toilet seat devices make using the toilet easier



OCCUPATIONAL THERAPY (OT)

The OTs will expand on the basics of mobility and function. It is important to remember that safety and body mechanics will take a while to relearn. Muscles are weak and you need to protect them by using equipment. OT makes sure you can apply these to:

- Brace application (if applicable)
- Activities of daily living (bathing, dressing, etc.) for promoting independence
- Body awareness and positioning
- Functional transfers and bed mobility
- Safe return to community level activities (driving, work, etc.)

ACTIVITIES OF DAILY LIVING KIT

- These are optional items you can purchase to allow you to pick up items, get yourself dressed and bathe independently without violating your spine precautions.
- The OT will work with your case manager to see if these items are covered by insurance. If they are not, you may purchase these items at a local medical supply store.

PRECAUTIONS

No "BLT"!

- **NO BENDING** over to pick up items. Use assistive devices to prevent the wrong movements.
- **NO LIFTING** more than 10 pounds. Nothing heavier than a gallon of milk!

- **NO TWISTING** the spine when performing any tasks. When turning the body, the shoulders and knees should always point the same direction.



BRACING

THORACIC BRACE

The thoracic brace provides postural support and reminders to stay upright. The brace should be worn most of the time to prevent twisting and bending movement of the trunk.



LUMBAR BRACE

The TLSO brace should be worn when out of bed or upright. This usually gives patients the maximum support and feels snug. The support you feel with the brace on is eventually the support your muscles should give you later as you learn posture and strength.



DISCHARGE FROM HOSPITAL

Our primary goal is to prepare you to go home and continue your recovery. You tend to be the most comfortable, eat better and sleep better in a familiar setting. You can also move around comfortably with frequent position changes. Your family and friends should plan to help you for the first five to seven days after surgery with physical activities around the house – walking with you, meals, positioning, laundry, etc. You should focus on your comfort, safety and changing position frequently.

If you are not able to safely function at home or have post-op restrictions that you cannot follow, you may need to go to an acute rehab facility or a skilled nursing facility for further rehabilitation. These facilities have more focused rehab to ensure you can progress to your home safely. If this is necessary, the hospital case manager will help to set up a location for you.

DRIVING

This is one of the primary questions after back surgery. You will be evaluated at your first follow-up visit with the surgeon. You cannot drive under the following situations:

- Still taking narcotics: not recommended
- Lumbar discectomy or laminectomy: two weeks
- Fusion: two to four weeks

AFTER HOSPITAL DISCHARGE: PAIN MANAGEMENT MASSAGE AND RELAXATION

Massage, deep breathing and relaxation practice can also help with pain management. Find a position of comfort and practice these techniques.

PAIN MEDICINE

Every four to six hours, take something for pain to keep medicine in your system. Taking your medication at regularly timed intervals helps to keep pain controlled the best. The strength of medication you take can vary, but regular times are important.

No anti-inflammatory drugs (NSAIDs – Aleve, aspirin, Advil, Naproxen) for four months. These medications interfere with the initial fusion process. Patients without a fusion surgery may take NSAIDs. Please verify with your surgeon.

ICE

Ice is helpful to decrease spasms and swelling. Flat ice packs are more comfortable for patients to lie on or apply to the neck and shoulders.

Use ice 20 to 30 minutes, three times per day and wait 60 minutes between icing sessions.

- Ice in a resealable bag
- Gel packs
- Frozen peas

MASSAGE AND RELAXATION

Massage, deep breathing and relaxation practice can also help with pain management. Find a position of comfort and practice these techniques.

ELECTRICAL STIMULATION

Transcutaneous electrical nerve stimulation (TENS) units are also helpful at this stage of your recovery. These devices have small pads that are applied on the muscles around your incision and electrical stimulation is delivered to decrease pain and spasm. Bone growth stimulators can also be used to assist the fusion by helping to promote bone to grow faster.

Bone growth stimulation may be helpful with fusion patients, i.e., patients with diabetes who undergo multilevel or redo-fusions. Please ask your surgeon.

HOME HEALTH

If this is ordered by your surgeon, the case manager will arrange for your home therapy to begin after hospital discharge. The name of the home care agency and their phone number is on that form, in the top right-hand corner. You may possibly also have a nurse coming to see you as well. On an as-needed basis, home health occupational therapy may also be arranged for you.

SKILLED NURSING FACILITIES

Our primary goal is to get you home for your recovery. You will eat better, sleep better and recover better in your own home. If we feel you are not safe to go to your home due

to medical or physical reasons, we will arrange for you to go to a skilled nursing facility (SNF). If you think this will be necessary, go and look at facilities in your area. Ask about therapy, shared rooms, and meals. Look around to see if this would be suitable for you. The rehabilitation care that you receive will be a continuation of the type of care you have received here. Expect to stay three to seven days, based upon your progress. Someone responsible may drive you or the case manager can arrange for transportation (which may not be covered by insurance). Transfer papers will be completed by your nurse. The facility's medical director or your primary care physician (PCP) can follow your care at the SNF. Upon discharge home, instructions and equipment will be given to you by the SNF staff.

CONSTIPATION

Pain medication can cause constipation. Use a combination of laxative and stool softener Senakot-S and Colace (or the combination Peri-Colace), twice a day for as long as it takes to help you stay regular (for about two weeks). Drinking plenty of fluids, water, juices and especially prune juice, can help. Eating four to six prunes a day can also help you.

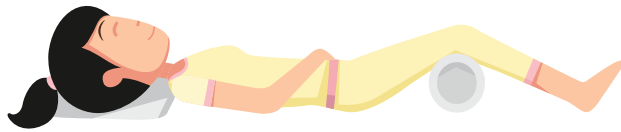
You should not go longer than three days without a bowel movement. Your PCP recommends medications like Dulcolax, Fleet enemas or magnesium citrate, available at your pharmacy and that do not require a doctor's prescription.

Your local pharmacist is also an available resource for you to also contact and help you manage your pain medications and constipation issues.

POSITIONING

The key to working with pain is changing positions frequently and to help patients find positions of comfort. Patients may need assistance to get into the most comfortable positions. We recommend having multiple pillows available to place in various areas around the patient. As patients begin to move better, they are increasingly able to position themselves.

- Avoid sitting for longer than an hour at a time for spine fusion patients.
- Supine: Lying on your back.
This can sometimes increase back pain, because it increases the natural curve of the low back.



Recommendations:

- Pillows under the knees are helpful in putting the low back into NEUTRAL SPINE.
- Use a bed or couch; do not use the floor.
- Side Lying
This is usually the most comfortable for patients. Patients should get into this position by LOGROLLING their body as one unit to decrease pain.



Recommendations:

- Pillows BETWEEN the knees; a pillow behind the back and tucked under provides support to roll back against; a pillow in front of the body to hug provides good arm support; a long body pillow can provide support in multiple areas.



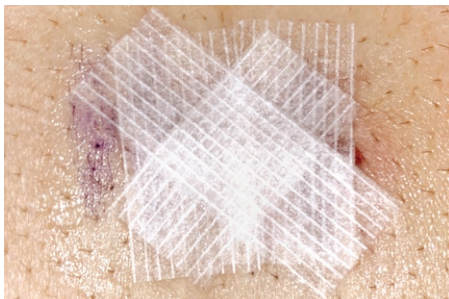
INCISION CARE

You will have staples, sutures or steri-strips on the skin after surgery. You may need to cover the incision with some type of occlusive dressing to shower.

- Staples or external sutures – You will be scheduled for a staple removal appointment 10 to 14 days after the procedure by the surgeon. If instructed, keep dry until removal by the surgeon.



- Absorbable sutures – Keep them dry after surgery, usually covered with steri-strip tapes and these will fall off on their own. These may be removed after 14 days if they are still in place then. The skin may be pink to light red and swollen. Ice works well to decrease pain and swelling.



DRAINAGE

Drainage from the wound can be normal after surgery, however contact the surgeon if:

- Drainage is continuous (through dressing onto clothing)
- Drainage is bloody or clear
- Drainage has an odor
- Skin is red and hot, even after icing for 20 minutes.

SHOWERING

Follow your physician's orders when showering. If you are required to cover your incision for showering, there is a sticky film dressing called Opsite or Tegaderm that can be used.

ACTIVITY

Everything you do is exercise after surgery. Change position as needed for comfort, use pillows for support and remember to take breaks to avoid doing too much.

WALKING

Walking is your primary activity! Your surgeon wants you walk as much as possible, building up to a mile a day. Getting upright can be challenging, however walking is easier. Add distance slowly doing the same or more each time.

- Begin by walking for 10-minute bouts, six times/day around your home or outside with someone beside you.
- If you use a walker, you may have to raise the height to a height that does not make you bend forward.
- Increase the time as tolerated. Monitor how the pain and stiffness increase or subside.
- Build distance up to one mile per day over the first two

to four weeks after surgery (**if pain is well controlled**).

- Patients with discectomy should avoid sitting for long periods of time. Frequent position changes are recommended for comfort.
- **AVOID** excessive bilateral arm elevations to prevent excessive activation of extensor muscles.



Outpatient physical therapy will begin six weeks after surgery. The office will give you a referral for PT and you can find a clinic in your local area to treat you.

QUESTIONS / CONCERNS

You can contact the Care Team with any questions or concerns at **(510) 818-1160**.

- Monday – Friday, the office is open from 8:30 a.m. to 5 p.m.
- Evenings, weekends and holidays – there is always an on-call physician. The answering service will take a message and give it to them. If you ask, they can call you back.
- Do not wait until something is an emergency to contact the office. We are available to answer your questions!

EMERGENCIES

- Do not wait until something is an emergency to contact the office. We are available to answer your questions!
- If there is an emergency, call 911 or go to your local emergency room.

FOLLOW-UP APPOINTMENTS

OFFICE VISIT

Refer to your “surgery letter” for your first follow-up appointment.

If you have staples, you should schedule an appointment for staple removal for 10 to 14 days after hospital discharge.

NON-FUSION PATIENTS:

TWO WEEKS AFTER SURGERY

If you did NOT have a fusion, you can begin the following exercises after your first post-operative visit with the surgeon. He will give you instructions for any precautions you must follow.

FUSION PATIENTS:

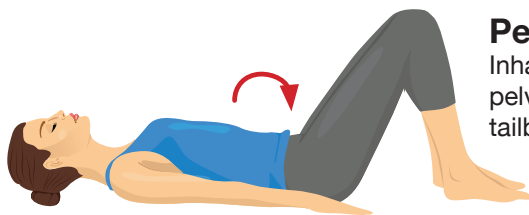
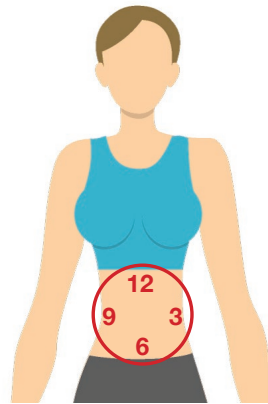
FOUR TO SIX WEEKS AFTER SURGERY

You must wait for clearance and precautions from the surgeon. He will give you instructions for any precautions you must follow. The fusion must heal completely before you are allowed to begin an exercise program.

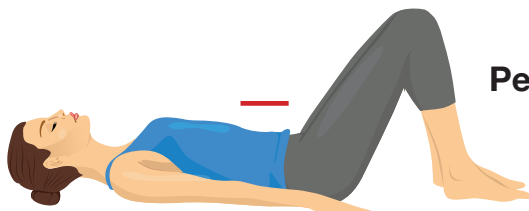
POST-OPERATIVE EXERCISES (AFTER FIRST MD VISIT)

SITTING UP / LYING DOWN PELVIC CLOCKS

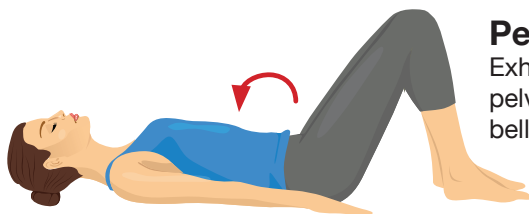
Practice small movements, tilting your pelvis up to 12 (flattening your back) and down to 6 (arching your back).



Pelvis Arched
Inhale and rock your pelvis towards your tailbone (the 6).



Pelvis Neutral



Pelvis Tucked
Exhale and rock your pelvis towards your belly button (the 12).

STRENGTHENING EXERCISES

QUAD SETS

- Lay on your back, press the back of your knee into the bed.
- Make the muscle on the front of your thigh tight.
- Hold and count to five out loud, relax.
- Do not hold your breath.



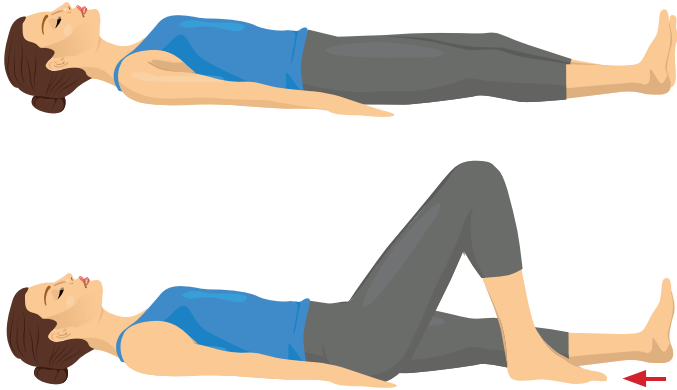
GLUTEAL SQUEEZE

- Lie on couch or bed. Squeeze your bottom together.
- Do not hold breath.
- Hold for 10 seconds. Relax.



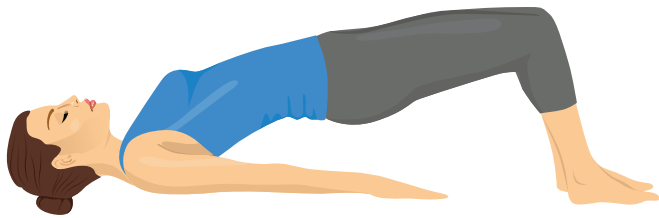
HEEL SLIDES (HIP AND KNEE FLEXION)

- Lie on your back.
- Keep your heel on the bed and slide your foot toward your buttocks as far as you can.
- Straighten your leg out completely.



HIP BRIDGING

- Bend your hips and knees so your feet are flat on the bed.
- Lift your buttocks up off the bed. Hold and count to five out loud.
- Relax, repeat.



HAMSTRING STRETCH: STRAIGHT LEG RAISES

- Lie on your back with your legs straight out in front of you.
- Loop a sheet, long piece of fabric, or soft cord around one foot.
- Grasp both ends in one hand. Place your other hand flat against your knee.
- Using the loop, pull your leg up into the air. Keep your hand against your knee to keep your leg straight.
- Continue to pull the loop (and your foot) toward your head until your leg resists. Keep firm pressure on your knee and keep it completely straight. Do not allow your leg to fall or your knee to bend.
- Repeat with the other leg.



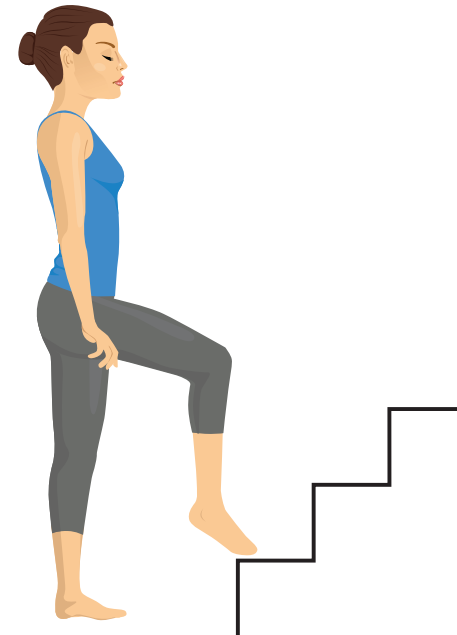
HEEL – TOE RAISES

- While standing, hold onto a firm surface.
- Raise up on toes.
- While standing, hold onto a firm surface.
- Push up on toes.
- Go back on heels.



SINGLE LEG STEP UP

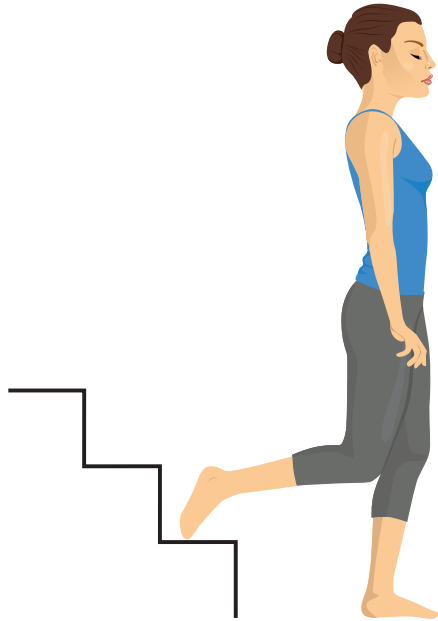
- Stand with chosen leg next to step.
- Place that foot up on the step and the other foot on the ground.
- Push your body up with chosen leg up onto step.
- Slowly lower your body back down to the ground.
- Repeat slowly 10 times.
- Exercise both legs.



RETRO STEP UP

Do this with your therapist first.

- Step backwards with one foot onto a step then the other foot.
- Step off forward in the same way.



HIP FLEXION

- While standing with support, march in place.
- Hold on to a counter top or wall. Have a chair nearby to sit down in case you need to take a break.

