For any questions, please contact the Orthopedic Care Coordinator at 229-353-2663

Find out your arrival time at the hospital

Call 229-353-7710 after 2 P.M. the day before surgery (or on the Friday before if your surgery is on a Monday) to find out what time you should arrive for your surgery.

TIFT REGIONAL
JOINT REPLACEMENT
& SPINE CARE CENTER

Patient Checklist

Thank you for choosing Tift Regional Joint and Spine Center. We look forward to assisting you along your Path of Progress. The following appointments have been scheduled and must be completed prior to surgery. You may also be contacted by someone to Pre-register you prior to surgery, you will still need to complete the below appointments prior to surgery.

Appointment Location	Appointment Time and Date	Completed
History and Physical Pre-Op Appointment Surgeon's Office 2227 US Hwy 41 North Tifton, GA 31794		
Pre-admission Testing (PAT) Day Surgery (Hospital) 20th Street Tifton, GA 31794		
Pre-Op Class 2227 US Hwy 41 North Tifton,GA 31794 **3rd Floor**		
Date of Surgery Day Surgery (Hospital) 20th Street Tifton, GA 31794		
Post- OP Follow Up Surgeon's Office 2227 US Hwy 41 North Tifton, GA 31794		

Important Phone Numbers:

Orthopedic Care Coordinator:	**229-353-2663**
Arrival Time to Hospital #:	**229-353-7710**
Georgia Sports Medicine:	**229-386-5222**
Surgery Scheduler:	**229-387-1196**
GSM Nurse Manager:	**229-387-1180**
Tift Regional Ortho Floor:	**229-353-7680**

Important Information:

- ☐ You will need to provide a urine sample at your Pre-Admission Testing Appointment
- ☐ Have co-payments ready if applicable - (for questions/arrangements contact Ms.Jean Drawdy at 229-387-1163)
- ☐ Read your Binder
- ☐ Choose a 'coach' to assist in your recovery - have them attend the Pre-Operative Education Class with you
- ☐ Plan your discharge someone will need to be with you the first 3-5 days you are home
- ☐ Prepare your home for after surgery (Remove all throw rugs)
- ☐ Follow doctor's directions for stopping any blood thinner medications prior to surgery
- ☐ Follow directions for preparation the morning of surgery

Medication List

Please fill out the Medication List with the requested information and bring with you to your pre-admission testing (PAT) appointment.

Name:		Family Doctor:	
Medication Name/Dosage	**Instructions**	**Reason for Therapy**	**Duration**
What is the name of your medication? What is the dosage?	When and how do you take this medication?	Why are you taking this medication?	How long have you been taking this medication?

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Section One:

Before Surgery

Welcome

We are pleased you have chosen The Joint Replacement and Spine Center at Tift Regional to have spine surgery.

The goal of cervical spine surgery is to:

- Relieve pain.
- Restore independence.
- Return to an active lifestyle.

Some patients may be able to walk or even go home the day of surgery. Generally, patients can return to driving in six weeks; to sedentary jobs and activities in one to two weeks; and to vigorous physical activities in six to twelve weeks. Patients undergoing more complicated operations such as multi-level cervical spinal fusion, may require three to six months to return to full activities.

Using the binder

The binder will assist you with:

- What to expect.
- What you need to do.
- How to care for yourself after spine surgery.

Your physician, nurse, or therapist may add or change any of the recommendations. Always use their recommendations first and ask questions if you are unsure.

Spine Center Overview

Program features include:

- Nurses and therapists trained to work with spine surgery patients
- Private rooms
- Emphasis on individual care
- Family and friends as “coaches”
- Spine Care Coordinator who facilitates discharge planning
- Patient binder

We believe patients play a key role in ensuring a successful recovery, so we involve them through every step of our program.

Your Spine Team

Orthopedic Surgeon - will perform the procedure to repair your spinal segment.

Physician Assistant (PA) or Nurse Practitioner (NP) - will check your status after surgery and communicate with surgeon, nurses and therapists to ensure pain is controlled and any medical needs are addressed.

Registered Nurse (RN) - will help to manage your pain, ensure treatments ordered by your doctor are completed, and assist with mobility as needed.

Physical Therapist (PT) - will guide you through functional daily activities and teach you exercises to regain your strength/motion.

Occupational Therapist (OT) - will guide you to perform tasks such as bathing/dressing and demonstrate home equipment use.

Orthopedic Care Coordinator (OCC) will:

- Answer questions and coordinate hospital care.
- Act as your advocate throughout treatment.
- Review at-home needs after surgery.
- Coordinate discharge plan with your care team.

Get Started - Four to Six Weeks Before Surgery

Contact Your Insurance Company

Before surgery, you will need to contact your insurance company to find out if pre-authorization, pre-certification, a second opinion, or referral form is required. Failure to clarify these questions may result in a reduction of benefits or delay of surgery. This is especially important if your spine problem is due to an injury at work. If you are a member of a health maintenance organization (HMO), you will need to call your HMO once your procedure has been scheduled to arrange for pre-admission lab studies that must be completed.

Importance of Your Coach

Involvement of a friend or relative acting as your coach is very important for support and to keep you focused on healing.

Billing for Service

After your procedure, you will receive separate bills from the anesthesiologist, hospital, and if applicable, surgical assistant, radiology, and pathology departments. If your insurance carrier has specific requirements regarding participation status, please contact your carrier.

Pre-registering

After your surgery has been scheduled, pre-admission screening will call you to gather information. You will need to have the following information ready when you are contacted:

- Patient's full legal name and address, including county
- Home phone number
- Religion
- Marital status
- Social Security number
- Name of insurance holder, his/her address and phone number, and his/her work address and work phone number
- Name of insurance company, mailing address, policy, and group number
- Patient's employer, address, phone number, and occupation
- Name, address, and phone number of nearest relative
- Name, address, and phone number of someone to notify in case of emergency — this can be the same as the nearest relative

Preadmission Testing (PAT)

Preadmission testing requires a visit to the hospital and will normally take 1- 1.5 hours. You will speak to a nurse at this appointment that will gather information regarding your health: past & present. It is not necessary to fast before this appointment, you may eat as you normally do. Please be prepared to provide the following information:

- Medication allergies and the reaction you have when you take those medications.
- Complete information on medications you are taking on a regular basis. Bring all your current medications with you to this appointment.
- Family health history: Parents, Grandparents, Siblings, Children, etc…
- Previous surgeries you have had and date they were done, if known.
- Personal health history:
    - Do you have any of the following: diabetes , high blood pressure, heart conditions, anxiety/depression, previous strokes and other pertinent information regarding your health
- Your height & weight will be obtained (high heels will have to be removed for height measurement)
- You may be required to give a urine specimen; please ask nurse prior to using the restroom.

You will speak with an anesthesia representative, either a doctor or certified nurse anesthetist at this appointment as well. This anesthesia representative may be the one providing you anesthesia the day of surgery. During this appointment:

- You will determine together the best type of anesthesia for you
- He /She will also discuss your meds. And you will be informed which ones to take the morning of surgery.
- It will be determined if you need further lab work, x-rays, EKG etc., and these will be completed while you are here.
- If medical or cardiac clearance is required this will be scheduled during this visit.

Medical Clearance

Your surgeon will determine whether you receive medical clearance from your primary care doctor and/or a specialist or the anesthesia doctors at TRMC. If you receive a medical clearance letter from your surgeon follow the instructions in that letter.

Laboratory Tests

Ordered labs will be drawn at your pre-admission testing appointment.

Medications That Increase Bleeding

Discontinue all anti-inflammatory medications such as aspirin, Motrin®, Naproxen, Vitamin E, etc. These medications may increase bleeding. If you are taking a blood thinner, you will need instructions for stopping the medication. The anesthesiologist will instruct you about your other medications.

Herbal Medicine

Herbal medicines can interfere with other medicines. Check with your doctor to see if you need to stop taking your herbal medicines before surgery.

Examples of herbal medicines: echinacea, ginkgo, ginseng, ginger, licorice, garlic, valerian, St. John's wort, ephedra, goldenseal, feverfew, saw palmetto, fish oil and kava-kava.

Healthcare Decisions

Advance Medical Directives communicate the patient's wishes regarding healthcare. There are different directives. Consult your attorney concerning the legal implications of each.

- **Living Wills** explain your wishes for healthcare if you have a terminal condition, irreversible coma, and are unable to communicate.
- **Appointment of a Healthcare Agent** (sometimes called a Medical Power of Attorney) lets you name a person (your agent) to make medical decisions if you become unable to do so.
- **Healthcare Instructions** are your choices regarding use of life-sustaining equipment, hydration, nutrition, and pain medications.

If you have an Advance Medical Directive, bring copies of the documents with you to the hospital.

Stop Smoking[1]

If you smoke, stop using tobacco products. The tar, nicotine, and carbon monoxide found in tobacco products have serious adverse effects on blood vessels and impair the healing of wounds and bone grafts. Continued tobacco use damages the other discs in your spine, leading to disease at other levels. And, smokers typically experience a greater degree of pain than non-smokers.

Smoke Free Campus Policy

Tift Regional Health System and the surrounding campuses provide a tobacco-free environment. Tobacco/smokeless tobacco use is prohibited inside and outside all buildings, in the parking lots, within any vehicles operated/owned by Tift Regional Health System and in any vehicles parked on Tift Regional Health System property. This policy is applicable to all people while on campus including but not limited to all patients, families, visitors, physicians, physician office personnel, volunteers, vendors, contractors, and employees.
The use of all tobacco or nicotine delivery products to include cigarettes, cigars, pipes, pipe tobacco, tobacco substitutes, chewing tobacco, smokeless tobacco, E-cigarettes, etc., by any person, is prohibited on Tift Regional Health System property.

Smoking:

- Delays your healing process.
- Reduces the size of blood vessels and decreases the amount of oxygen circulated in your blood.
- Can increase clotting which can cause heart problems.
- Increases blood pressure and heart rate.

If you quit smoking before surgery, you will increase your ability to heal. If you need help quitting, ask about hospital resources.

Smoking can impair oxygen circulation to your healing spine. Oxygen circulation is vital to the healing process.

When you are ready:

- Decide to quit.
- Choose the date.
- Limit the area where you smoke; don't smoke at home.
- Throw away all cigarettes and ashtrays.
- Don't put yourself in situations where others smoke.
- Reward yourself for each day without cigarettes.
- Remind yourself that this can be done – be positive!
- Take it one day at a time – if you slip, get back to your decision to quit.
- Check with your doctor if you need products like chewing gum, patches or prescription aids.

[1]Smoking Threatens Orthopedic Outcomes. Negative effects should prompt orthopedists to address the issue with patients. S. Terry Canale, MD; Frank B. Kelly, MD; and Kaye Daugherty http://www.aaos.org/news/aaosnow/jun12/cover2.aspMotrin is a registered trademark of McNeil-PPC, Inc. All rights reserved by trademark owner.

Start Pre-operative Exercises

Exercise is important in the rehabilitation process following spine surgery, but it is imperative that you participate in a pre-operative exercise program as well. The exercises found below help to strengthen and condition your muscles in preparation for surgery and the post-rehabilitation phase. To enhance your recovery from surgery, try to incorporate these exercises and aerobic exercise (walking, water aerobics, and recumbent bicycle) into your daily routine. Past patients have mentioned how helpful it was to take time to "strengthen" muscles in their arms/legs prior to surgery.

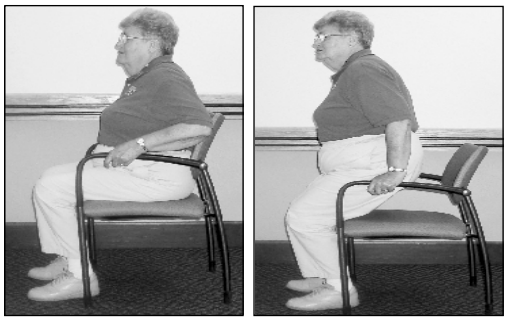
Pre-operative Exercises

NOTE: All exercises should be pain-free. If any exercise causes pain, consult your physician before continuing program.

1. **Chair Push-up**
2. **Quad Sets**
3. **Abdominal Sets (Tummy Tucks)**
4. **Shoulder Circles**
5. **Scapular Retraction – Initial Phase**
6. **Straight Leg Raises**
7. **Hamstring Sets**

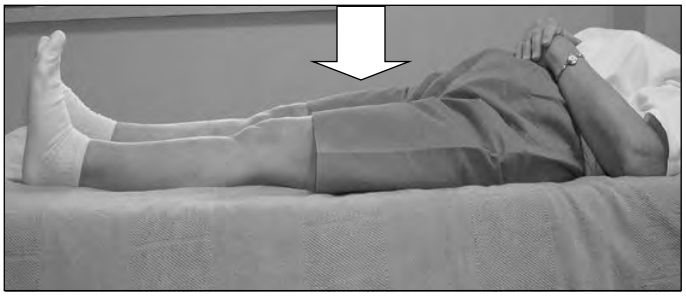
1 Chair Push-up

Sit in chair. Use arms to push body up from chair. Keep elbows slightly bent and feet on floor. Return to chair slowly. Focus on using arms instead of your legs.
Sets: 1-2 — Reps: 10
Hold: 5-10 sec. — Frequency: 1-2x day



2 Quad Sets

Lie flat on back with one leg straight. Tighten quadriceps muscles (muscles on front of thigh), pressing back of knee into the bed and hold as indicated. Repeat with other leg. Do not hold breath.
Sets: 1 — Reps: 20
Hold: 10-15 sec.— Frequency: 2x day



3 Abdominal Sets (Tummy Tucks)

Lie flat on back with knees bent. Tighten stomach (abdominal) muscles by drawing belly button toward spine. Feel abdominal muscles tighten across front. Hold position and continue to breathe comfortably. If can't breathe comfortably, then you are trying to tighten muscles too much.
Sets: 1 — Reps: 20
Hold: 10-15 sec.— Frequency: 2x day

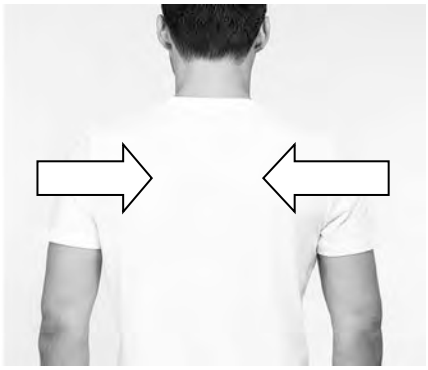
NOTE: This exercise is the beginning of a lifelong challenge of being able to keep abdominal muscles tightened all day long. Strengthened muscles provide continuous support for spine.

4 Shoulder Circles

Raise and lower shoulders using circular motion.
Sets: 1 — Reps: 20
Hold: 10-15 sec. — Frequency: 2x day

5 Scapular Retraction – Initial Phase

Pinch shoulder blades together. Do not shrug shoulders.
Sets: 1 — Reps: 20
Hold: 10-15 sec. — Frequency: 2x day



6 **Straight Leg Raises**

Lie flat on back with one leg bent at knee. Raise up opposite leg while keeping the knee straight. Then lower leg down slowly. Repeat with other leg.
Sets: 1 — Reps: 20
Hold: 10-15 sec. — Frequency: 2x day

Prepare Your Home

- De-clutter your home. Put away area rugs that may be a tripping hazard.
- Shop ahead! Have frozen dinners available to pop into the microwave and paper plates to limit washing. Have plenty of liquids available. Pain medications can give you dry mouth.
- Complete yard work and mowing.
- Arrange for neighbors/family to collect mail and newspapers.
- Change your bed with fresh linens.
- Place nightlights in bedrooms, hallways, and bathrooms.
- Place essential and frequently used items at counter level in the kitchen. Take out items from lower or upper cabinets and store them on the counter temporarily.
- Pay current bills so you do not have to worry about them.
- Line up support, especially if you live alone. Arrange for friends to call on certain days or stop by to make sure you don't need any assistance.
- No special chair is needed, but one that offers you support and comfort is best.

Pets

- Have help for the first days to keep food and water available for pets.
- Plan for a dog walker for the first week (at the least). You do not want to lose your balance or be jerked by your excited canine friend!
- If you have cats, have the litter box up on a high table or counter so you don't have to bend down to clean it.

Breathing Exercises

To prevent problems such as pneumonia, practice breathing exercises using the muscles of your abdomen and chest.

Deep Breathing

- Breathe in through your nose as deep as you can.
- Hold your breath for five to 10 seconds.
- Breathe out as if you were blowing out a candle. Notice your stomach going in. Breathe out for 10 to 20 seconds.
- Take a break and then repeat the exercise 10 times.

Coughing

- Take a slow deep breath. Breathe in through your nose and fill your lungs completely.
- Breathe out through your mouth and concentrate on your chest emptying.
- Repeat.
- Take another breath, but hold your breath and then cough hard. When you cough, focus on emptying your lungs.
- Repeat all steps twice.

Techniques such as deep breathing, coughing, and using an Incentive Spirometer may help prevent respiratory complications after surgery.

Surgery Timeline

Four Weeks Before Surgery
Start Vitamins You may be instructed to take multivitamins.

Two to Three Weeks Before Surgery		
Pre-Register Call 229-353-7371 at least 1 week prior to your scheduled Pre-admission testing (PAT) appointment to pre-register at the hospital.		
Pre-admission Testing (PAT) Appointment Attend your scheduled Pre-admission testing (PAT) appointment. Bring your medication list and advanced directive (if you have one).		
Pre-operative Class Attend the pre-operative class for spine surgery patients. Bring your coach. If you cannot attend, inform the OCC.		
Class Outline:	- Understanding Your Procedure - What to Expect During Your Hospital Stay - Physical and Occupational Therapy - Pain Management	- Review Pre-operative Exercises - Learn About Assistive Devices and Joint Protection - Discharge Planning/Insurance/Equipment -Role of the Caregiver/Coach
Medical Clearance Appointments You may be asked to visit your primary care doctor and/or other specialists depending on your medical history and condition. If asked to do so, make sure to complete all appointments at least 2-4 weeks prior to surgery in order to prevent delay or cancellation of your surgery.		

Ten Days Before Surgery

Pre-operative Visit to Surgeon

Have an appointment in your surgeon's office seven to 10 days before surgery. This is a final check-up and time to ask any questions. Some patients with acute disc herniations may have a shorter time between the visit and surgery. You should schedule your 10-day and six-week post-operative visits at this time.

Preparing the Skin Before Surgery

Preparing or "prepping" skin before surgery can reduce the risk of infection at the surgical site. To make the process easier, TRMC has chosen disposable cloths moistened with a rinse-free, 2% Chlorhexidine Gluconate (CHG) which is an antiseptic solution.
Complete instructions on how to use CHG wipes can be found on Page 21

Day Before Surgery

Find Out Your Arrival Time at the Hospital

Call 229-353-7710 after 2 p.m. the day before surgery (or Friday if surgery is Monday) to find out what time you should arrive for your surgery.

Night Before Surgery

Shower Prep

After completing your regular bathing routine with antibacterial soap. Wait for 1 hour and then use the SAGE preoperative skin preparation cloths provided at Preadmission Testing. **Complete instructions on how to use CHG wipes can be found on Page 21**

Your surgeon will provide instructions for the night before surgery. Generally: Do not eat or drink anything after midnight, EVEN WATER, unless otherwise instructed.

Day of Surgery
Follow instructions given to you at your PAT appointment for the night before surgery. Generally: Do not eat or drink anything after midnight, EVEN WATER, unless otherwise instructed.
Come to Day Surgery (20th Street entrance) at the time you are instructed to arrive. It is important you arrive on time in order to be properly prepared prior to your surgery. This allows the staff time to start IVs, prep, and answer any questions you may have.

Items to Take to the Hospital

- Patient binder
- Personal hygiene items (toothbrush, deodorant, razor, etc.).
- Loose fitting clothes (button up shirts).
- Slippers with non-slip soles; flat shoes or tennis shoes.
- Loose-fitting warm-up suit for the ride home.
- Battery-operated items (NO electrical items with the exception of your CPAP if needed).
- Favorite pillow with pillowcase in pattern/color so it will not end up in hospital laundry. Use the pillow during your stay and in the car for ride home.
- Any brace your physician has given you for your neck.
- Co-payment required by insurance company.

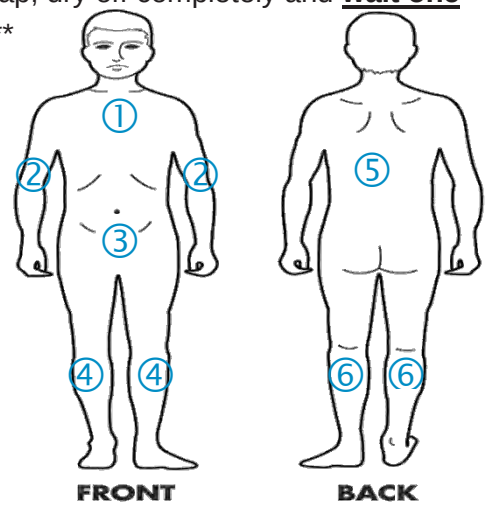
Special Instructions

- You will be instructed by your primary care doctor or pre-screening nurse which of your daily medications to take or omit the morning of surgery.
- Leave jewelry, valuables, and large amounts of money at home.
- Remove makeup before procedure.
- Remove all nail polish.
- Do not use body lotion, deodorant, hair spray, aftershave, etc. after using the CHG cloth.

2% CHG Cloth

*****DO NOT USE ON THE FACE*****

****After completing your regular bathing routine with antibacterial soap, dry off completely and **wait one hour** to use the SAGE preoperative skin preparation cloths****



Prepping your skin, the night before: (**wait one hour after bathing**)

- **Use one clean cloth to prep each area of the body in order as shown in** steps 1 through 6. **Wipe each area in a back-and-forth motion for about** 15 seconds**. Be sure to wipe each area thoroughly. Assistance may be required.**
- Use all 6 cloths in the packages.
- **Do not allow this product to come in contact with your eyes, ears and mouth.**
- **Do not rinse or apply any lotions, moisturizers or makeup after prepping.**
- **Allow your skin to air dry. Do not rinse off (There may be a temporary "**tacky feelingò**until solution is completely dry; about 3-5 minutes).**
- **Discard cloths in trash can.** Do Not Flush.

Note: **If redness, rash and/or burning should occur. Discontinue use and wash skin**

Steps:

Cloth #1-**Wipe your** neck and chest**.**

Cloth #2-**Wipe** both arms**, starting each with the shoulder and ending at the fingertips. *Be sure to thoroughly wipe the arm pit areas*.**

Cloth #3-**Wipe your** right and left hip **followed by your** groin**. *Be sure to wipe folds in the abdominal and groin areas*.**

Cloth #4-**Wipe front of** both legs**, starting at the thigh and ending at the toes.**

Cloth #5-**Wipe your** back **starting at the base of your neck and ending at your waist line. Cover as much area as possible. Assistance may be required.**

Cloth #6-**Wipe back of** both legs**, starting at the heels and ending at the buttocks.**

Frequently Asked Questions (FAQs)

Questions about Cervical Surgery

What is wrong with my neck?
You may have a “pinched nerve.” This can be produced by a ruptured disc or by bone spurs. Discs are rubbery shock absorbers between the vertebrae, and are close to the nerves which travel down to the arms. If the disc is damaged, part of it may bulge or even burst free into the spinal canal, putting pressure on the nerve and causing arm pain, numbness, or weakness. Bone spurs, usually the result of arthritis, can also put pressure on nerves. Occasionally, pressure from bone spurs or a ruptured disc may affect the spinal cord and cause abnormalities in the legs or lower parts of the body.

What is required to fix the problem?
In most cases, a small (three to four inch) incision is made in the font part of the neck. Muscles supporting the spine are pushed aside temporarily, and a small “window” is made into the spinal canal. The spinal nerve is protected, and the ruptured part of the disc or the bone spur is removed. If bone spurs and arthritis are the cause of your problem, you may require a bigger incision and more bone may have to be removed.

When is this operation necessary?
In almost all cases, the major reason for spine surgery is pain which is intolerable to the patient. Often non-surgical measures can control the pain satisfactorily. However, if the pain persists at an unacceptable level, if you cannot function because of pain, or if weakness or other neurologic problems develop, then surgery may be necessary to relieve the problem.

Frequently Asked Questions about Cervical Laminectomy

Who performs this surgery?

Both orthopedists and neurosurgeons are trained in spinal surgery and both specialists may perform this surgery. It is important that your surgeon specialize in this type of procedure.

How long will I be in the hospital?

Our goal for most patients is to stay 24 hours. Complications may require longer stays. This procedure can be performed as either an outpatient or inpatient procedure. Inpatient stays are usually 1 day.

Will I need a blood transfusion?

There is usually very little blood loss with this operation; transfusions are generally not required.

What can I do after surgery?

You should try to get up and move around as much as your symptoms allow. You may walk as much as you like.

What shouldn't I do after surgery?

For at least six weeks, avoid lifting (no more than 10 pounds), overhead activities, frequent or repetitive neck movements and vigorous sports until instructed otherwise by your surgeon.

When can I go back to work?

That depends on what kind of work you do and how far you have to drive. It can be as little as two weeks, but may be longer if your job involves manual labor or if you have to drive more than 30 minutes to get there. Your surgeon will provide guidance on resumption of work or activities following surgery.

What are my chances of being relieved of my pain?

The goal of cervical spine surgery is relief from nerve symptoms or arm pain. Neck and shoulder pain are less predictably relieved by disc surgery. Some patients may experience neck and shoulder aching after surgery, especially those who have a substantial amount of neck and shoulder pain before surgery.[1] Other conditions such as fibromyalgia may also produce continued pain even after successful disc surgery. Discuss surgery options and goals with your surgeon.

[1]AANS.org, http://aans.org/en/Patient%20Information/Conditions%20and%20Treatments/Cervical%20Spine.aspxaccessed August 2013

Will my neck be normal after surgery?

No. Even if you have excellent relief of pain, the disc has still been damaged. However, most people can resume almost all of their normal activities after disc surgery. Your surgeon will provide guidance on resumption of work or activities following surgery.

Could I be paralyzed?

Neurologic injury with disc surgery is possible, but not likely. The possibility of catastrophic injury such as paralysis is also unlikely, but not impossible. Injury to a nerve root with isolated numbness and/or weakness in the arm is possible.

What other risks are there?

There are general risks with any type of surgery. These include, but are not limited to, the possibility of wound infection, uncontrollable bleeding, collection of blood clots in the wound or in the veins of the leg, pulmonary embolism (movement of a blood clot to the lung), heart attack, stroke, and death. These events rarely happen, especially to a generally healthy patient.

Should I avoid physical activity?

No. Exercise is good for you. You should get some sort of low-impact aerobic exercise at least three times a week. Walking either outside or on a treadmill and using an exercise bike are all examples of the type of exercise which is appropriate for spine patients. Consult with your surgeon to determine what exercise plan is best for you.

Questions About Cervical Fusion

What is wrong with my neck?

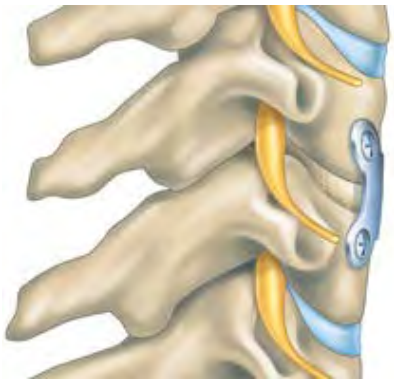
You have one or more damaged discs in your neck. Discs are rubbery shock absorbers between the vertebrae, and are close to the nerves which travel out to the arms. If the disc is damaged, part of it may bulge or even burst free into the spinal canal, putting pressure on the nerves and causing arm pain, numbness, weakness, and/or pain in the neck or shoulder area. Occasionally, this pressure may affect the spinal cord and cause abnormalities in the legs or lower parts of the body. Bone spurs, usually the result of arthritis, can also put pressure on nerves or the spinal cord. Loss of the normal “shock absorber” function, or arthritis around the damaged disc, can also produce mechanical pain around the neck or shoulders with neck movement or awkward positions.

What is required to fix the problem?

Generally, the best approach to your problem is to remove the damaged disc and bone spurs from the front, or anterior part, of the neck and to perform a fusion between the adjacent vertebral bodies. Certain conditions, however, may require the surgeon to perform the fusion using a posterior approach instead.

What is spinal fusion?

A fusion is a bony bridge between at least two other bones, in this case two vertebrae in your spine. The vertebrae are the blocks of bone which make up the bony part of the spine, much like a child’s building blocks stacked on top of each other to make a tower. Normally each vertebrae moves within certain limits in relationship to its neighbors. In spinal disease, the movement may become excessive and painful, or the vertebrae may become unstable and misaligned, putting pressure on the spinal nerves. In cases like this, surgeons try to build bony bridges between the vertebrae using pieces of bone, which we call a bone graft. The bone graft may be obtained either from the patient himself, usually from the pelvis, or from a bone bank. There are advantages and disadvantages to either source. The bone graft is laid between the vertebrae. The bone graft has to heal and unite to the adjacent bones before the fusion becomes solid. Spine surgeons often use plates to protect the bone graft and stabilize the spine during the healing period, attaching them to the spine using screws.



Frequently Asked Questions about Cervical Fusion Surgery

How long will I be in the hospital?

Our goal for most patients is to leave in 24 hours.

Will I need a blood transfusion?

Transfusions are generally not needed for cervical spine surgery. A transfusion may be needed in rare tumor or unusual reconstruction cases.

What can I do after surgery?

Please refer to the Cervical Fusion Discharge Instructions for details. You should try to walk and take care of yourself as much as you are able. You should try to exercise each day. You may perform low-impact activities not requiring lifting or neck movement as allowed by your brace. If a brace is not required, you may drive when allowed by your surgeon. Your surgeon will provide guidance on resumption of work or activities following surgery.

What shouldn't I do after surgery?

You should avoid lifting heavy objects, and avoid all overhead lifting. Twisting, repetitive bending and tilting your head back to look overhead are also stressful to the neck. If you are a smoker, you definitely should not smoke until your fusion is completely solid. Smoking interferes with bone healing.

Will I need to wear a neck brace?

Generally, most patients will wear some type of neck brace after this surgery. The type of brace and length of time you need to wear the brace will be determined by your surgeon.

When can I go back to work?

That depends on the type of work you do. If a brace is required, you will not be able to drive until you no longer need the brace. For sedentary jobs, work may resume when you feel comfortable and can get to work. For jobs which require more strenuous physical exertion, a longer healing time may be required. Your surgeon will discuss this with you individually.

What are the chances of being relieved of the pain?

The goal of surgery is to relieve pain, especially relief from arm pain. Relief of neck pain is also possible, although may be less predictable.

Will my neck be normal after surgery?

No. While most patients have excellent relief of arm pain after surgery, your neck will not be completely normal. While most patients with a one- or two-level fusion will not notice significant loss of motion, the stiffened segment of your spine does put additional stress on adjacent discs, which may already be abnormal to some extent. These other discs may cause symptoms. Although most patients can resume most of their normal activities after healing, you should take care of your neck.

Could I be paralyzed?

There is a slight chance of neurologic injury with spinal surgery. Injury to a nerve root with isolated numbness and/or weakness in the arm is possible. Rarely, complete or partial paralysis may occur following surgery.

What other risks are there?

The risks of this operation include, but are not limited to, anesthesia, wound infection, uncontrollable bleeding, collection of blood clots in the wound or in the veins of the leg, pulmonary embolism (movement of a blood clot to the lungs), and heart attack. These complications occur rarely, but are possible. Death may rarely occur during or after any surgical procedure.

Could I have difficulty swallowing?

Most patients report mild discomfort with swallowing for a few days after surgery. Occasionally, swallowing difficulties may be more significant and last for longer periods of time. Rarely, it may be necessary to place a feeding tube while swallowing returns to normal. If swallowing difficulty persists longer, notify your physician.

Will my voice be affected?

Some patients may be hoarse after anterior cervical spine surgery. Usually this goes away within a few days or weeks. Rarely, the hoarseness may be persistent for a longer period of time or even be permanent.

Is the entire disk removed?

Yes.

Could this happen to me again?

Unfortunately, yes. Similar conditions which led to the disc damage being treated now may have already started in one or more of the other discs in your neck Some fusions may not heal normally, which may require additional surgery. The chance of this happening increases if fusion is attempted at more than one level, which is why spine plates are sometimes used for multi-level fusions The goal for the majority of patients is to find pain relief and return to activities, although some patients may have recurring problems.

Should I avoid physical activity?

No. Exercise is good for you. You should get some sort of low-impact aerobic exercise at least three times a week. Walking either outside or on a treadmill, using an exercise bike, and swimming are all examples of the type of exercise which is appropriate for spine patients. Your surgeon will provide guidance on resumption of work or activities following surgery.

Who performs this surgery?

Both orthopedists and neurosurgeons are trained to do spinal surgery. It is important that your surgeon specialize in this type of procedure.

Section Two:

At the Hospital

Understanding Anesthesia

Anesthesiologists

The Operating Room and Post Anesthesia Care Unit (PACU) at the hospital are staffed by board certified and board eligible doctor anesthesiologists and anesthetists.

Type of Anesthesia

Spine surgery requires the use of general anesthesia, which provides loss of consciousness and requires the use of an endotracheal tube.

Side Effects

Your anesthesiologist will discuss the complications or side effects that can occur.

You will be given medications to treat nausea and vomiting which sometimes occurs with the anesthesia. The amount of discomfort you experience will depend on several factors, especially the type of surgery. Your discomfort should be minimal, but do not expect to be totally pain free. Staff will teach you the pain scale to assess your pain level.

Requests for specific anesthesiologists should be submitted in advance through your surgeon's office.

Understanding Pain

It is our aim to make your surgery as pain-free as possible. Pain management is not perfect, and you will have some discomfort after your operation. There are several factors that limit our ability to completely eliminate pain after surgery. The first is that pain medications have side effects. These may include decreased ability to breathe normally, low blood pressure, nausea, and constipation. Other less common side effects may include itching, urinary retention, and abdominal distention (collection of gas within the intestines). These side effects mean that the amount of medication may have to be reduced at times to avoid creating dangerous or uncomfortable conditions.

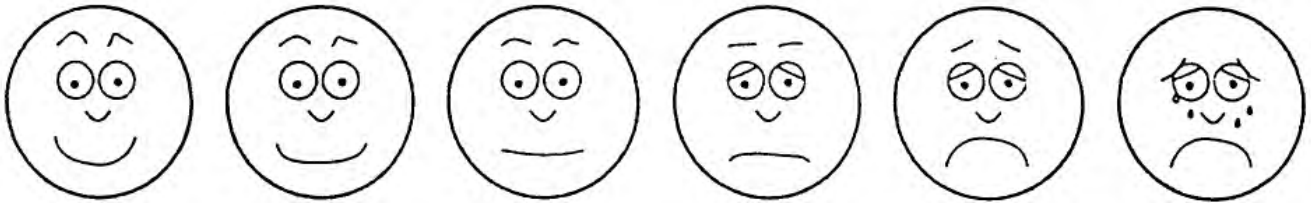
Another factor is tolerance. This body tends to become less responsive to the pain-reducing action of narcotics after being exposed to them for periods of time. Patients who have taken large doses of narcotics for months or years may have a much harder time keeping comfortable after surgery. It is very important for you to provide accurate information to your surgeon about the amount of pain medication you have been taking. Inaccurate information could result in a needlessly painful and stressful post-operative course. It may be necessary to taper or discontinue your use of narcotics prior to surgery.

Your Role in Pain Management

Once you have had your surgery, we will rely heavily on your own assessment of your pain, and work with you to relieve it. Most patients will receive intermittent low doses of pain medication into their IV which they control with a small pump. After 12-24 hours you will transition to oral pain medications. Generally, these are the same medications you will take at home once you are discharged from the hospital.

Pain Scale

Using a number to rate your pain can help the Spine Team understand and help manage it. “0” means no pain and “10” means the worst pain possible. You may also hear the terms “mild”, “moderate” or “severe”. With good communication, the team can make adjustments to make you more comfortable.



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Hospital Care - What to Expect

Before Surgery

- Your anesthesiologist will review your information to evaluate your general health. This includes your medical history, laboratory test results, allergies, and current medications.
- Intravenous (IV) fluids will be started and pre-operative medications may be given.
- You will be fitted with compression stockings.
- Before you receive the anesthesia, monitoring devices will be attached (blood pressure cuff, EKG, and other devices).

During Surgery

- The anesthesiologist will manage vital signs — heart rate and rhythm; blood pressure; body temperature and breathing; as well as monitor your fluid and need for blood replacement if necessary.

After Surgery

- You will be taken to the Post Anesthesia Care Unit (PACU) where pain control is established and vital signs will be monitored.
- You will then be taken to the Joint Replacement and Spine Center.
- Most of the discomfort occurs the first 12 hours following surgery, so you may receive pain medication through your IV (PCA).
- **Only one or two very close family members or friends should visit on surgery day.**
- There will be a dressing over your neck incision.
- At some point on this day, you will be assisted out of bed to walk or sit in a chair. Physical Therapy and Occupational Therapy will most likely begin today. This will prevent blood clots from forming in your legs.
- We will instruct you on breathing exercises, ankle pumps, compression stockings, and benefits of ambulation.

Days Following Surgery

- Each day generally starts with blood work obtained early in the morning.
- A post-op x-ray of your cervical spine is needed so your surgeon may see the surgical area before you are discharged.
- After the x-rays, our staff will help you to a chair for breakfast.
- Intravenous (IV) pain medication will likely be stopped 12-24 hours after surgery; you may begin oral pain medication.
- You will be evaluated by Physical Therapy and Occupational Therapy if not completed the day of surgery, therapy services will continue daily as needed.

Incentive Spirometer Instructions

An incentive spirometer is used to perform deep breathing exercises and prevent respiratory complications after surgery.

- Sit in an upright position if possible
- Hold or stand incentive spirometer in an upright position
- Breathe out normally, and then place your lips tightly around the mouthpiece
- Breathe in **slowly**, raising the white piston, while keeping the yellow piston in the “Best” range
- Continue to breathe in slowly, completely filling your lungs
- When you are unable to breathe in anymore, remove the mouthpiece and hold breath for 10 seconds, then breathe out normally
- Allow the white piston to return to the bottom

Repeat the above steps 10 times resting in between exercises if needed.

Please ask your Respiratory Therapist if you have any questions or concerns. You may contact the Tift Regional Respiratory Department by dialing extension 37526.

Discharge Options

Going Directly Home

When patients are ready for discharge from the hospital, certain criteria are generally met. Patients are ambulating well; eating and drinking well; and, taking oral medication to control discomfort.

Do not go home alone, but have someone with you to be your caregiver for the next two to three days. This can be a friend or family member who can change your dressing and help you with your compression stockings. This caregiver will also help with meals and household activities. During these first few days at home, we want you to concentrate on your recovery. If equipment (rolling walker, bedside commode) is needed, the physical or occupational therapist will make these recommendations and Case Management will assist with obtaining this for you while you are in the hospital.

Going to a Sub-acute Rehab Facility

While most patients go directly home, sometimes the services of home physical therapy or sub-acute rehabilitation is needed. If so, the Spine Care Coordinator will make these referrals for you. The general length of stay for cervical laminectomy and anterior cervical fusion is one to two days. Posterior cervical fusion patients generally stay one to three days while anterior/posterior patients can be at the hospital for two to three days.

Patients who desire sub-acute rehabilitation prior to returning home must meet their insurance company's specific criteria before approval can be granted. If you do not meet these criteria, but strongly wish to pursue rehab, you may have the option to pay privately for your stay.

The requirements for Medicare patients are somewhat different. Medicare patients who are considering a rehab stay, must first satisfy a three-night stay in the hospital. This three-night stay cannot be for the purpose of discharge planning alone, but due to true medical need. If you meet these conditions, Medicare covers the first 20 days of rehab at 100 percent. If you do not satisfy the three-night stay in the hospital, but still wish to consider rehab, you may pay privately for the room and board and have the rehab facility bill Medicare Part B for the therapy services. Costs for room and board vary from facility to facility and often require a down payment prior to admission. Patients and families are urged to visit facilities before coming in for surgery. Please contact the admissions office at the facility to discuss your options.

If you are considering rehab, it is strongly recommended that you also develop an alternate plan in the event you do not meet the insurance criteria. We often "dual" plan our patients so that a smooth and efficient discharge from the hospital is achieved.

Section Three:

At Home After Surgery

Try not to nap during the day so you will sleep at night.

Caring for Yourself at Home

Things you need to know for safety, recovery, and comfort.

Be Comfortable

- Take pain medicine at least 30 minutes before physical activity.
- Wean from prescription medication to non-prescription pain reliever. Take two Extra-strength Tylenol ® tablets up to four times per day.
- For three months after surgery, do not take over-the-counter anti-inflammatory medication such as Ibuprofen (Motrin®, Advil® and Aleve®). This type of medication can interfere with bone healing and jeopardize the success of surgery. If you have prescription anti-inflammatory medication, consult your physician before taking it.
- If your surgeon has prescribed a muscle relaxer, take this to help muscle spasms. Gentle stretching may ease muscle spasm. Gentle massage applied to the muscle spasm may help to reduce discomfort.
- Muscle strain and spasm can often be reduced by elevating arms with pillows. Using this positioning technique, along with pain medication will optimize your comfort.
- Apply heat to areas of muscle spasm only. Do not use heat around your incision; this will cause swelling.
- Change position frequently (every 45 minutes – 1 hour) to prevent stiffness.
- Avoid bending, lifting, and twisting (BLTs).
- Take slow, controlled, deep breaths. Cough deeply and use your incentive spirometer several times each hour. This helps to expand your lungs and prevent pneumonia or respiratory complications. Deep breathing can also assist in relaxing your muscles and body.
- Breathing and relaxing while you move will help reduce muscle tension.

Body Changes

- Appetite may be poor; desire for solid food will return.
- Drink plenty of fluids.
- May have difficulty sleeping.
- Energy level will be decreased for first month.
- Pain medication that contains narcotics promotes constipation. Use stool softeners or laxatives, if necessary. Do not let constipation continue. If stool softener and Milk of Magnesia do not relieve discomfort, contact family doctor or surgeon.

Compression Stockings

You will wear special stockings to compress veins in your legs. This helps keep swelling down and reduces the chance for blood clots.

- Wear stockings continuously, removing one to two hours twice a day.
- Wear stockings for two weeks after surgery.

Incision Care

- You may shower (not tub bathe) after 48 hours.
- Remove dressing before shower, pat incision dry after shower, clean with alcohol and replace dressing.
- Notify surgeon if increased drainage, redness, pain, odor, or heat around the incision.
- Take temperature if warm or sick. Call surgeon if exceeds 100.5 degrees.

Dressing Change Procedures

Your nurse will give you specific instructions before you are discharged home. Generally, steps are as follows.

Gauze Dressing

1. Wash hands.
2. Open dressing materials.
3. Remove stocking and old dressing.
4. Inspect incision for:
    - increased redness
    - increased clear drainage or yellow/green drainage
    - odor
    - surrounding skin hot to touch
5. Clean the incision with alcohol.
6. Pick up gauze pad by corner and lay over incision. Be careful not to touch inside of the dressing that will lie over the incision.
7. Place one pad over the incision and tape it into place.

Occlusive Dressing

If incision has clear, occlusive dressing, follow these instructions:

- If dressing remains dry, remove occlusive dressing on post-operative day #2. Leave the incision open to air or redress as described above. Inspect incision daily. If dressing becomes wet with collection of fluid or blood, remove promptly and follow gauze dressing instructions. Change dressing daily and as needed until incision remains dry.

Dermabond™

If incision has Dermabond (skin glue), follow these instructions:

- If dressing remains dry, remove occlusive dressing on post-operative day #2. Carefully try to lift gauze from incision. If gauze adheres to incision, do not pull it loose. Trim away loosened gauze as needed. After a few days, gauze should come free.
- If dressing becomes wet with collection of fluid or blood, remove promptly and follow instructions for "gauze dressing." Change dressing daily until incision remains dry.

Recognizing and Preventing Potential Complications

Infection

Signs	• Increased swelling and redness at incision site. • Change in color, amount, and odor of drainage. • Increased pain around incision. • Fever greater than 100.5 degrees.

Prevention	• Take proper care of incision. • Take sponge baths for first two days. • After that, shower as long as wound is clean, dry, and not red. • AVOID tub bathing for at least three weeks after surgery. Keep wound clean and dry as much as possible to avoid potential infection until it fully heals.

Blood Clots

Surgery may cause blood to slow and coagulate in veins of legs, creating a blood clot. If a clot occurs, you may need to be admitted to the hospital to receive intravenous blood thinners.

Signs	• Swelling in thigh, calf, or ankle that does not go down with elevation. • Pain or tenderness in calf.

Prevention	• Perform ankle pumps. • Walk several times a day. • Wear compression stockings. • Elevate your feet/legs.

Pulmonary Embolism

An unrecognized blood clot could break away from the vein and travel to the lungs. This is an emergency — **CALL 911**.

Signs	• Sudden chest pain. • Difficult and/or rapid breathing. • Shortness of breath. • Sweating. • Confusion.

Prevention	• Prevent blood clot in legs. • If you suspect a blood clot has formed in leg — call primary care doctor or surgeon promptly.

Discharge Instructions

Your nurse will discuss discharge instructions with you. Generally, the following guidelines will apply.

Cervical Laminectomy

Immediate Post-op until Discharge from Hospital

- Get out of bed as soon as possible.
- Walk as much as possible.
- Keep wound clean and dry.
- Wear brace or collar as instructed.

Discharge until First Office Visit

- Wear your brace as instructed until first office visit where you will receive further instruction on how to wear your brace.
- Continue to walk. Gradually increase distance.
- Shower, but do not bathe in tub or swim.
- Remove dressings from surgical incision before showering. (Do not remove steri strips)
- Plan to take it easy and rest for next week at home; gradually increase activity as tolerated.

First Visit (approximately 10 days post-operative) until Six Weeks

- Gradually increase activities.
- Remain on feet for longer periods and increase walking distances.
- No bending, twisting, or lifting more than 10 pounds.

Six until 12 Weeks

- At six-week visit, you will be shown exercises to strengthen neck muscles.

12 until 24 Weeks

- Avoid heavy lifting or repetitive bending and twisting of neck. Continue until advised.
- Refrain from pool activity that causes repetitive twisting of head and neck like swimming. Walking in water can be therapeutic during this time.

Cervical Fusion

Immediate Post-op until Discharge from Hospital

- Get up as desired wearing the collar ordered by your physician.

Discharge until First Office Visit

- Be up as much as possible; wear your brace as instructed until first office visit where you will receive further instruction on how to wear your brace.
- Shower, but do not tub bathe or swim.
- Remove any dressings from surgical sites before showering and replace after shower.
- Avoid driving, although you may be passenger.
- Avoid strenuous activity. Walk as much as you feel comfortable with.

First Visit (approximately 10 days until six weeks post-operative)

- Increase activities using brace/collar as before.
- Shower, bathe, and participate in low impact aerobic activity, such as walking, exercise bike, or treadmill.
- Return to work as instructed by physician.
- Do not drive if you are still wearing brace.
- Avoid lifting anything over 10 pounds.

Six to 12 Weeks

- May be weaned from brace/collar depending upon x-rays. If out of brace, may drive, otherwise continue as before.
- No running, contact sports, or lifting weights over 10 pounds. Use soft collar for comfort.

12 to 24 Weeks

- Avoid heavy lifting (over 10 pounds), repetitive bending, and twisting of neck. Continue restrictions until x-rays indicate you are completely healed and physician releases you to full activity.
- Refrain from pool activity that causes repetitive twisting of the head and neck like swimming. Walking in the water can be therapeutic during this time.

Post-operative Goals

Weeks One to Two

- Continue to walk using walker as needed. As pain and discomfort lessen, increase walking distance, and wean yourself from walker as you feel comfortable.
- Walk frequently, slowly increasing your distance by 500-1000 ft. as tolerated.
- Gradually resume daily activities and household tasks, but always adhere to spinal precautions (no bending, lifting, twisting).
- Do home exercises at least twice per day.
- Progress to doing exercises three times per day.

Weeks Three to 12

- Walk daily, steadily increasing your distance and endurance. Increasing distance one to three miles as tolerated.
- Wean yourself from the walker.
- Gradually resume community tasks. Give yourself frequent rest breaks. No ongoing activity for more than 30 minutes without resting.
- Adhere to spinal precautions (no bending, lifting, twisting).
- Do home exercises at least three times a day.

Post-operative Exercise

A post-operative exercise program is an important component of successful spine surgery. Patients should work with physical therapists to develop a maintenance program that is specific to their needs and one they enjoy. Ultimate goal is to restore strength, flexibility, and mobility through a progressive and safe exercise program. Consult with your surgeon or physical therapist before starting any exercise program.

- Exercises help to stabilize spine and improve strength and flexibility, thus optimize surgical outcome and functional mobility.
- Start with low-impact exercises such as recumbent bike or walking on a treadmill. At three weeks, once incision heals and surgeon approves, start water aerobics. These are good low-impact exercises for your entire body.
- Exercises are best done on a firm surface. Protect your neck. Keep good posture when exercising. Move slowly. Stop if you have excessive pain or discomfort.
- Read your body. If you notice increased discomfort or fatigue, recall what you did earlier that day or the day before. Chances are, you overdid things and need to scale back until tolerated. Continue to slowly advance as you tolerate the activity.
- When performing an exercise, keep abdominal muscles tight by "pulling your belly button in toward your spine." Breathe continuously when performing exercises. Count out loud to keep from holding breath.

Principles of Exercises

When Standing

1. Keep head level with chin slightly tucked in.
2. Stand tall by looking forward and keeping shoulders over hips.
3. Relax shoulders.
4. Tighten stomach muscles by pulling in stomach. This will relieve undo stress on your spine.

When Sitting

1. Keep head level and chin slightly tucked in.
2. Place buttocks all the way to back of chair. Rolled towel in small of back provides lumbar support. Do not slouch.
3. Keep feet flat on floor to support back. When feet dangle, it pulls at lower back. If feet don't firmly touch the ground, place feet on stool and put pillow behind back.

When Walking

1. Goal is to advance the distance you walk each day.
2. For first few days at home, do multiple short walks throughout the day.
3. Advance your walking distance. Frequency is better than walking a certain distance. This approach is better for reducing stiffness.
4. Keep head up, chest up, shoulders back and relaxed, buttocks and stomach tucked in, and use walker as needed.

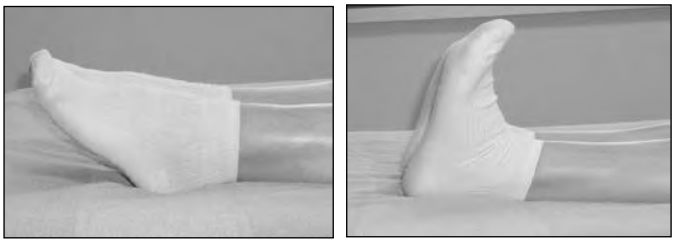
Exercises – Weeks One to Two

General Fitness Exercises

Note: All exercises are one set or 15 times per day unless otherwise noted.

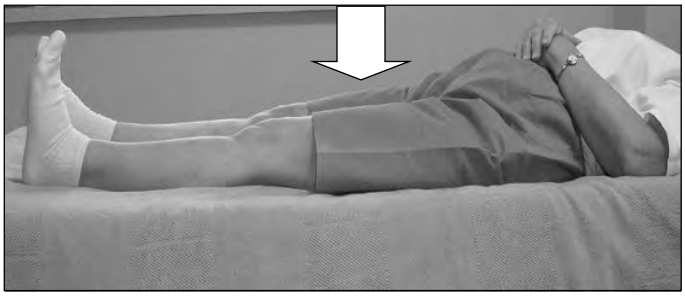
Ankle Pumps

Move ankles up and down as far as possible in each direction. To prevent back strain, perform this exercise while lying flat.
Sets: 1— Reps: 20 — Frequency: 2x day



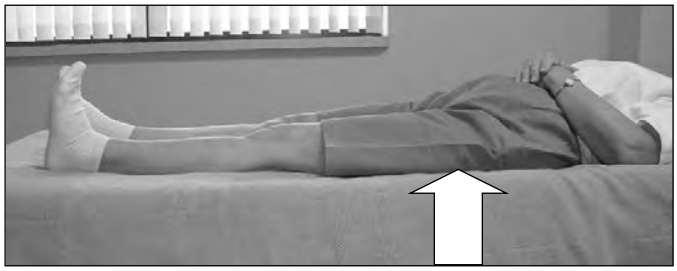
Quad Sets

Lie flat on back with one leg straight. Tighten quadriceps muscles (muscles on front of thigh), pressing back of knee into the bed and hold as indicated. Repeat with other leg. Do not hold breath.
Sets: 1 — Reps: 20
Hold: 10-15 sec.— Frequency: 2x day



Gluteal Sets (bottom squeezes)

Sit, lie or stand. Squeeze bottom together. Do not hold breath.
Sets: 1— Reps: 20
Hold: 10-15 sec.— Frequency: 2x day



Abdominal Sets (Tummy Tucks)

Lie flat on back with knees bent. Tighten stomach (abdominal) muscles by drawing belly button toward spine. Feel abdominal muscles tighten across front. Hold position and continue to breathe comfortably. If can't breathe comfortably, then you are trying to tighten muscles too much.
Sets: 1 — Reps: 20
Hold: 10-15 sec.— Frequency: 2x day

NOTE: This exercise is beginning of lifelong challenge of being able to keep abdominal muscles tightened all day long. Strengthened muscles provide continuous support for spine.

Straight Leg Raises

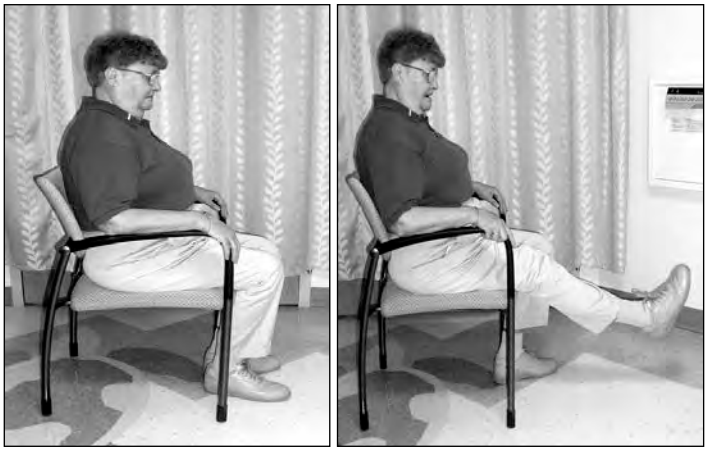
Lie flat on back with one leg bent at knee. Raise up opposite leg while keeping the knee straight. Then lower leg down slowly. Repeat with other leg.
Sets: 1 — Reps: 20
Hold: 10-15 sec. — Frequency: 2x day

Heel Slides (slide heel up and down)

Lie flat on back. Slide heel toward your bottom. Keep your opposite knee bent to support your back. Repeat with other leg.
Sets: 1 — Reps: 20 — Frequency: 2x day

Long Arc Quads (knee extensions)

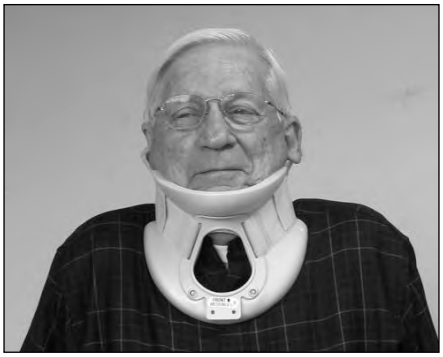
Sit in chair with knees bent (place buttocks at back of chair). Slowly extend one leg until knee is straight and hold. Return to starting position. Repeat exercise as indicated with other leg.
Sets: 1— Reps: 20
Hold: 10-15 sec. — Frequency: 2x day



Exercises Specific to Cervical

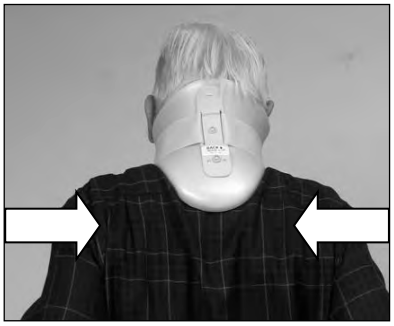
Shoulder Circles

Raise and lower shoulders using circular motion.
Sets: 1 — Reps: 20
Hold: 10-15 sec. — Frequency: 2x day



Scapular Retraction – Initial Phase

Pinch shoulder blades together. Do not shrug shoulders.
Sets: 1 — Reps: 20
Hold: 10-15 sec. — Frequency: 2x day



Horizontal Shoulder Stretch

Place one arm across your chest with opposite hand on elbow; pull arm across chest. Stretch is felt in back of arm, shoulder, and neck.
Sets: 1 — Reps: 20
Hold: 10-15 sec. — Frequency: 2x day

Exercises – Weeks Three to Six

Note: All exercises are one set or 15 times per day unless otherwise noted.

Scapular Retraction – Progressive Phase

Start with elbows positioned at shoulder level. Pull arms back while squeezing shoulder blades together as if rowing boat.
Sets: 1 — Reps: 20
Hold: 10-15 sec. — Frequency: 2x day

Active Shoulder Flexion

Standing or sitting alternately raise one arm forward over head with thumb up and elbow straight. Lower arm slowly.
Sets: 1 – Reps: 20
Hold: 10-15 sec. – Frequency: 2x day

Note: Before progressing with hand weights, consult physician or therapist.

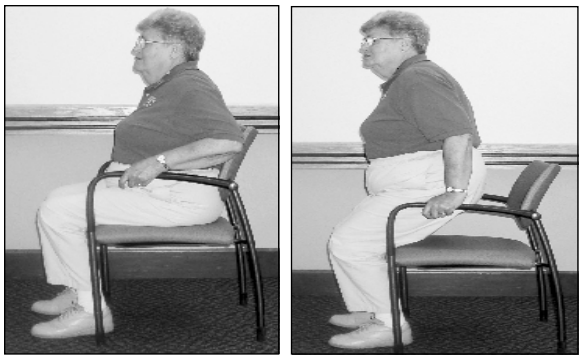
Active Shoulder Abduction

Place arm directly to side. Leading with thumb raised, straighten arm over head. Lower arm slowly. Repeat with other arm.
Sets: 1 — Reps: 20
Hold: 10-15 sec. Frequency: 2x day

Note: Before progressing with hand weights, consult physician or therapist.

Chair Push-up

Sit in chair. Use arms to push body up from chair. Keep elbows slightly bent and feet on floor. Return to chair slowly. Focus using arms instead of legs.
Sets: 1-2 — Reps: 10
Hold: 5-10 sec. — Frequency: 1-2x day



Wall Push-up

With arms shoulder width apart and feet about three feet from wall, gently lean body in toward wall allowing elbows to bend. Then straighten elbows while still leaning into wall. To repeat, bend elbows to starting position.
Sets: 1 — Reps: 20
Hold: 10-15 sec. — Frequency: 2x day

Corner Stretch

Standing in corner of room with both arms out to side and one leg forward, gently shift weight forward toward corner. Stretch is felt across front of chest. Hold for 10 seconds and repeat five times.
Sets: 1 – Reps: 20
Hold: 10-15 sec. – Frequency: 2x day

Tricep Stretch

Place one arm behind head keeping neck straight. Put opposite hand on elbow. Pull arm to opposite side. Stretch is felt on side and shoulder. Hold for 10 seconds and repeat 5 times with both arms.
Sets: 1 — Reps: 20
Hold: 10-15 sec. Frequency: 2x day

Activities of Daily Living

Cervical Spine Precautions: No "B.L.T."

Check with surgeon or physical therapist for specific post-operative precautions. General guidelines include:

No Bending

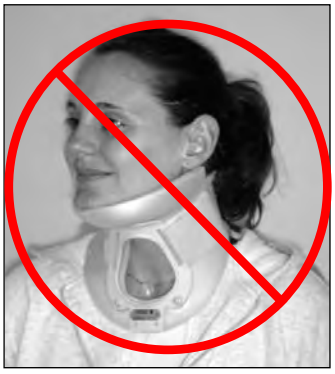
- Keep head straight and facing forward. Do not tilt head side-to-side, forward, or backward.
- Practice optimal body mechanics by keeping chest up, shoulders back, and abdominal muscles tight. This helps maintain neutral spine position and reduces stress on spine.

No Lifting

- Do not lift more than 10 pounds for one to two months after surgery.
- To lift an object, keep chest upright, bend at knees and hips, and hold object close to body.

No Twisting

- Keep ears and hips pointing in the same direction.
- To look behind you or to either side, turn entire body. Do not just turn your head.

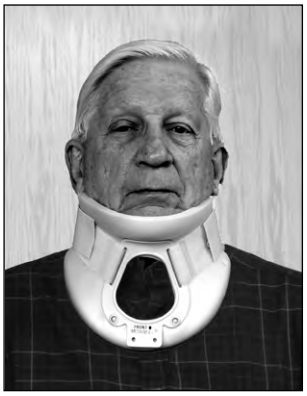


Neck Braces

Soft Collar

Least restrictive and least supportive of all cervical braces is the soft collar. Patients may be instructed to wear the soft collar at all times or only when out of bed. A soft collar is simple to put on and only requires fastening a Velcro strap at back of the neck. Chin should rest at a small divot in front of collar. Be careful not to turn head side-to-side in this brace as it will not prevent you from performing this motion.

Philadelphia Cervical Collar®



A slightly more supportive brace is the Philadelphia® collar also referred to as the "Philly® collar." This brace is made out of foam and has a rigid plastic support at the neck. The chin trough prevents you from turning head side-to-side. Some people call this your 'shower brace' because it is made of non-absorbing foam and can get wet (the straps will become wet, but can air dry). Collar is designed to give support and prevent motion that may be detrimental to healing or surgery. If you are told to wear this collar out of bed, please do so. The Philly® collar fastens on the side with back portion sliding inside of front portion so Velcro straps can be fastened securely.

Miami J Collar®

The Miami J Collar® is another firm brace that is sometimes used after surgery or after neck trauma to prevent motion and provide support. It is made of plastic with soft foam pads that Velcro to the plastic. The foam pads can be removed to launder and air dry. Chin should rest on chin trough at front and center of collar. Back portion should slide inside front and then the straps should be fastened securely. An orthotist, surgeon or therapist should make sure this brace is adjusted correctly to your size.

Bed Positioning

Lying on Your Back

- Place pillow under knees or thighs, under neck, and under arms. This position reduces stress on your spine.
- When you change positions, tighten abdominal muscles and log roll keeping hips, shoulders, and ears lined up.

Note: To place pillow behind head, make sure it is supporting shoulders and head. Avoid large pillows — they can push head and neck forward. Goal is to choose a pillow that will keep neck straight, not bent forward, backward, or to side. Wear cervical brace at all times as directed by your surgeon.

Lying on Your Side

- With knees slightly bent up toward chest, place pillow between knees and one under neck. This helps to keep optimal alignment of spine.
- Tighten abdominal muscles and log roll when changing positions.
- Adding pillow under arm will increase comfort and further reduce stress on spine.

Lying on Your Stomach

- Avoid this position.

Bed Mobility

Getting Out of Bed

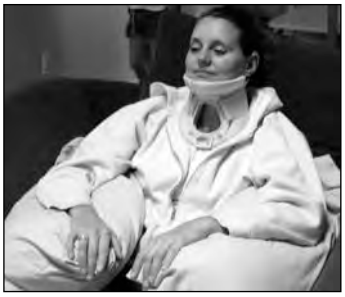
To move in and out of bed, "log roll" to prevent bending or twisting of spine. Start by bending knees up while lying on back. Now roll onto side keeping hips, shoulders, and ears moving together to avoid twisting (i.e., roll like a log).

As you slide feet off bed, use arms to push up into sitting position. Scoot hips forward until feet are on floor and you feel stable. Using arms to help scoot typically helps minimize surgical pain. Scoot far enough forward so feet are flat on floor (heels included) to support lower back.

Returning to Bed

Reverse technique for returning to bed. Back up to bed until you feel bed at the back of your legs. Reach for the bed with hands as you lower to sitting position on bed. Scoot hips back on bed. The further back you scoot; the easier it will be to lie down on your side. As you lean down on your arm, bring feet up onto bed until you are lying down on your side. Then, roll onto back keeping shoulders, hips, and ears in alignment.

Sitting Posture



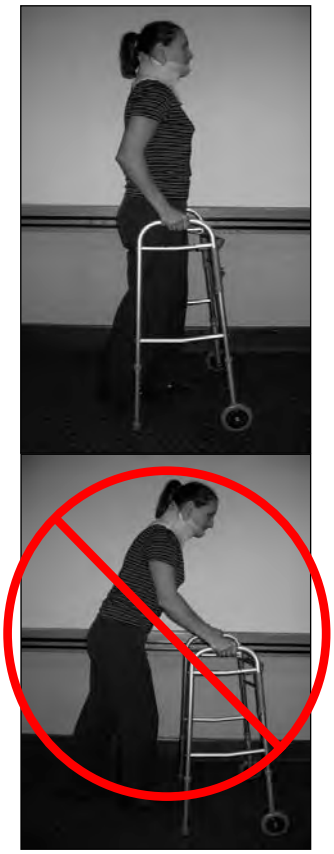
Many patients choose to sleep in a recliner chair for a few days after neck surgery. Adjustable back position of recliner offers comfortable upright positioning for head and neck, as well as armrests that support arms. It may also be easier to stand up from a chair instead of a bed.

Position of Comfort

Immediately after surgery, patients complain of neck and shoulder pain and have trouble finding a comfortable resting position. Placing pillows under forearms and elbows may help to reduce pull on neck and shoulder muscles while sitting in recliner or lying in bed.

Using a Walker

When using a walker, it is important to remember key rules.



- Push up from surface you are sitting on (e.g., bed or chair). Avoid pulling on walker to stand. Walker could easily tip backward and will not offer optimal support to stand.
- It's easiest to stand up from a chair with armrests and from a bedside commode with armrests. Armrests give better leverage and control to stand up and sit down safely.
- Keep feet near back of walker frame or rear legs. Don't be too close or too far from walker. Stay inside walker.
- Stand up straight when walking. Keep shoulders back, head up, chest up, and stomach muscles tight.
- Using a walker with wheels keeps you from having to lift it - just push the walker forward as you walk.
- Taking smaller steps and walking slower does not necessarily make it easier to walk. You may end up expending more energy than necessary. Move at your own pace and comfort level.

Transfers

Getting Into a Chair

Back up to chair until it touches back of legs. With hands, reach behind to grasp armrests of chair. Using arms and legs, squat and lower yourself into chair.

Special Instructions:

- Tighten stomach muscles to provide support for lower spine.
- Feet should be firmly resting on floor or foot stool. Do not let feet dangle as this will place additional stress on spine.

Getting Out of a Chair

Scoot forward until you are sitting near edge of chair. With hands on armrests push yourself up into standing position. Straighten legs and shift weight forward over feet. Bring hands to walker as you are moving into standing position.

Helpful Tips with Sitting:

- Do not let feet dangle when sitting. Have feet firmly supported to prevent pulling at back.
- Protect back by sitting in chair with back support. Use pillow or towel as lumbar roll. May also prefer to support neck with small pillow or towel roll.

Getting Into the Car

Back up to car seat until you feel it at back of legs. Reach hand behind you for back of seat and the other hand to secure spot either on frame or dashboard. (Door and walker are not secure options. If you need to use them, have someone hold the “unsteady” objects.) Lower slowly to sitting. Scoot hips back until you are securely on seat.

Leading with hips, bring one foot into car at a time until you are facing forward. Prevent twisting by keeping shoulders, hips, and ears pointing in same direction. May want to recline seat to increase ease of lifting legs. Keep seat slightly reclined while riding to support back from “bumps” in road.

Getting Out of the Car

When getting out of car bring legs out one at a time. Lead with hips and shoulders and do not twist back. Place one hand on back of seat and one hand on frame or dashboard. Push up to standing. Reach for walker when you are stable.

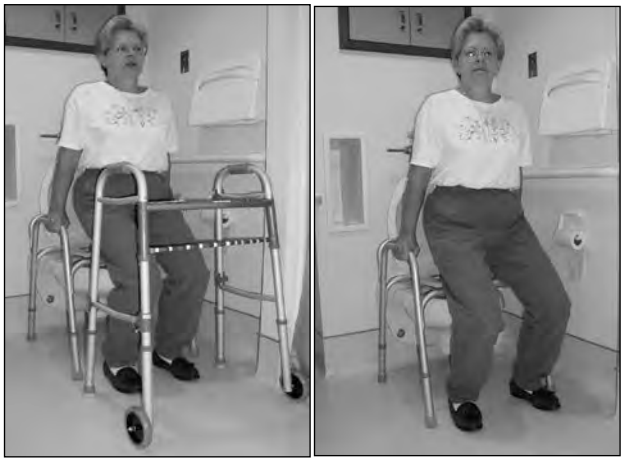
Helpful tips with car transfers:

- Have empty plastic bag on seat to help slide in/out.
- Have seat positioned all way back so you have maximum leg clearance.
- If you have to have one hand on walker for leverage, have someone hold walker down on front bar for stability.

Your surgeon will determine when you can return to driving. You need to have full neurologic function and minimal pain or discomfort before driving. You also need to discontinue taking medications that may affect your driving skills and safety.

Getting Onto the Commode

Back up to commode like you would chair. Without twisting to look, reach back for handles of commode or toilet seat and squat using arms to help slowly lower down to sitting position. Feet should be flat on floor for support while sitting.



Getting Off of the Commode

Use arms to lift body and scoot hips forward to edge of commode seat. With knees bent and feet placed underneath you, push up through legs and arms into standing position. As you stand, maintain support by reaching for walker one hand at time.

Bathing

Stepping in/out of tub:

- If shower is part of tub, hold onto front wall of shower and step in or out sideways versus stepping in forward. This side-step places much less stress and motion on lower spine.
- If a walk-in shower stall, step in as usual making sure not to twist as you turn to controls.
- May want to have a bathtub or shower seat available for first few days you shower. Borrow these items or buy them inexpensively. Small patio resin/plastic chair work for this. Small tub/shower benches can be purchased at most drug stores or medical supply stores.
- Your doctor will provide clearance on taking a tub bath.

Sitting

- Sit in chairs that support back and neck. Keep ears in line with hips. If needed, support lumbar curve with rolled-up towel or lumbar roll.
- Knees should be level with hips. Feet should be well supported on floor to support spine. If needed, place feet up on footrest.
- Do not slouch. This puts back out of alignment and adds extra stress to lumbar curve. Do not sit too far away from steering wheel when you drive.
- Keep your shoulders back and head centered over hips.
- Do not let shoulders roll forward.

Computer Ergonomics

- Keep computer screen at eye level.
- Have lumbar support for chair.
- Armrests need to be placed at level that supports forearms and keeps them at waist level. Forearms should not be pushing up into shoulders.
- Adjust height of chair so keyboard is level with forearms.
- Maintain good upright sitting posture.
- Take frequent standing/rest breaks while working (every 20-30 minutes).

Lower Shelf

- When placing an object on low shelf, always bend down on one knee.
- Use other leg to support.
- Never bend over from waist to place item on shelf.

Using Stairs

Negotiating Consecutive Steps

- Use handrail and/or cane for assistance.
- If one leg feels weaker than other, go up steps with stronger leg first and down steps with weaker leg first. Remember, "up with the good and down with the bad."
- If unsteady, take one step at time. This will make negotiating steps easier and safer.
- Concentrate on what you are doing. Do not hurry.
- Have someone assist or spot you as you feel necessary or indicated by therapist. Person should stand behind and slightly to side when going up steps. When going down steps, person should be in front.

Helpful Stair Tips

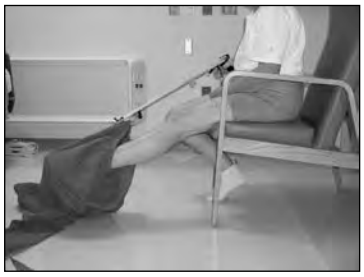
- Keep steps clear of objects or loose items.
- Plan ahead. Right after surgery keep items in areas where you can limit stair use.
- Install one or two handrails. Two handrails will increase ease and safety with steps.

Negotiating Curb or One Single Platform Step

- Use rolling walker.
- Move close to step.
- Place entire walker over curb onto sidewalk. Make sure all four prongs/wheels are on curb.
- Push down through walker toward ground.
- Step up with stronger leg first, then follow with other leg.
- Reverse process for going down a step. Place walker below step, then step down leading with weak leg first.

Personal Care

Using a Reacher



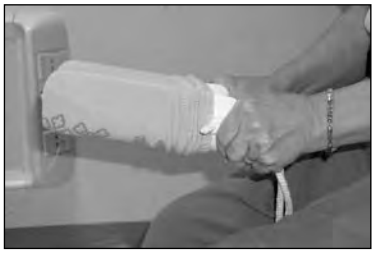
Using a reacher limits amount of bending required to dress. Sit down in a chair with back supported. Use reacher to hold front of undergarments or pants. Bring garment over one foot at a time pulling underwear, then pants up to thighs. Stand up, squat to reach clothing and pull up both garments at same time. Reverse process to remove your clothing.

Using a Reacher to Pick Up Items

Reacher helps you obtain those items that fall while you are under "no bending" restrictions. Use it as an arm extension to reach to floor.

Using a Sock Aid

Sock aid helps you reach feet without bending. Sit supported in chair and hold sock aid between knees. Slide sock onto plastic cuff making sure to pull toes of sock all way onto sock aid. Hold ropes and drop sock aid down to foot. Place foot into cuff and pull up on ropes as you point toes down until sock is on foot. Let go of one rope and pull cuff back onto your lap to don other sock.



Removing a Sock with the Reacher

Use black hook on reacher to push sock over back of heel. You continue pushing sock completely off foot or use jaw of reacher to pull sock completely off foot.

Body Mechanics

This section will give general tips on how to practice and adapt safe body mechanics to everyday work activities. There are eight main sections (Standing, Sitting, Lifting, Turning, Reaching, Pushing vs. Pulling, Sleeping and Do's & Don'ts). Under each section, there are general rules of thumb followed by more specific examples of activities you may perform. This is not an exhaustive list, but should help you learn to apply and practice optimal body mechanics when performing activities.

NOTE: There is not only one correct way to do a task. It depends on your abilities. You may need to alter ways of moving based on your strength, flexibility, pain level, and/or other medical conditions. Check with surgeon or physical therapist for details.

Standing

- Do not lock knees. Slightly bent knees takes the stress off lower back.
- Wear shoes that support feet. Helps to align spine.
- If you stand for long periods of time, raise one foot up slightly on a step or inside frame of cabinet. Resting foot on low shelf or stool can help reduce pressure and constant forces placed on spine. Shift feet often.
- While standing, keep shoulders back so they do not roll forward.
- Keep back as upright as possible; keep head and shoulders aligned with hips.

Shaving

- Stay upright with one foot on ledge of cabinet under sink.

Showering

- When showering, try not to let head bend forward or backward (i.e., when washing hair). Squat down with knees or use tub bench and/or hand-held shower spout so neck remains straight.

Brushing Teeth

- While brushing teeth, stand up straight and keep knee bent with foot on cabinet lip.
- To avoid bending forward, spit into cup and use cup for rinsing mouth with water. Support back by leaning one arm on sink/counter as you spit into sink. Bend at knees, not back.

Ironing

- While ironing, keep ironing board waist level to avoid leaning forward at back.

Help Around the House Once Cleared by Your Physician

(these activities are discouraged immediately post-op)

Sink

- When standing at the sink, open the cabinet doors to expose the lower lip of the cabinet, keep one foot on the floor and prop the other foot on the lower lip of the cabinet to reduce stress on the back.

Refrigerator

- Bend at knees and hips to get things out of lower portion of refrigerator. It is better to squat or kneel instead of bending.

Dishwasher

- To get objects out of dishwasher, squat or kneel down by door.
- Try sitting on swiveling office chair to unload dishwasher. Place items up onto counter by pivoting around with feet. Then stand and put items into the cupboard.

Bathroom

- Do not overextend or get down on knees to scrub bathtub. Use mop or other long-handled brushes.
- Try to move lower by squatting and brace yourself with a fixed object.
- Always use non-slip adhesive or rubber mats in tub or "aqua/water shoes."

Making Bed

- Do not to bend over too far when making bed.
- Try to move sheet to corners and kneel or squat to pull them around mattress.

Dusting

- Use dusting implements that reach distances so you do not have to reach far or lean your head backward.

Cleaning

- To clean overhead or tall objects, use step stool so you do not have to overreach.

Wiping Lower Surfaces

- When wiping or dusting low objects, do not bend lower back.
- Try to kneel or squat next to object.

Vacuuming (Type of Pushing/Pulling Task)

- Use legs, not back, when vacuuming.
- Do not vacuum by reaching out away from body.
- Try to work for small intervals of time with frequent breaks.
- Keep vacuum close to body.
- Use a lightweight vacuum.

Sweeping/Mopping

- Use full length of broom to sweep.
- Do not hold broom handle close to floor.
- Try to keep spine as straight as possible.
- Sweep with motion coming from hips instead of shoulders.
- Do not get down on knees to scrub floors, instead use a mop.

Laundry - Loading Washer

- Place laundry basket so bending and twisting can be avoided.
- Place basket on top of washer or dryer instead of bending down with back.

Laundry - Unloading Washer

- To unload small items at bottom of washer, lift up one leg when reaching down into washer.
- Do not bend at waist to reach into washer when loading/unloading.

Laundry - Unloading Dryer

- Do not bend at lower back when removing laundry from dryer.
- Set basket on floor and squat/kneel next to basket when unloading dryer or front-load washer.
- Try "golfer's bend" to unload washer/dryer by supporting with one hand on unit and holding opposite leg straight out as you bend forward. This allows you to keep back straight and take some pressure off back with arm supporting you.

Lifting Laundry

- Pick up laundry basket by squatting near it. Do not bend over to lift.

Childcare - Lift from Floor

- Do not bend over at back to pick up child. Instead, squat down, bring child close to chest and lift with legs.

Childcare - In/Out of Car

- When placing infant or child in car seat, always support yourself. Place knee on seat of car to unload the stress placed on back.
- Never bend over at waist.

Holding a Child

- To maintain good posture and decrease stress on back, hold baby/child to center of body, not propped on hip.

Carrying a Child

- Hold baby by cradling in arms.
- Keep baby close to body.
- Keep baby's head as upright as possible.

Turning

- Think of upper body as one straight unit, from shoulders to buttocks.
- Turn with feet, not back or knees. Point feet in direction you want to go. Step around and turn. Maintain spine's three curves.
- Do not keep feet and hips fixed in one position, and do not twist from back. Joints in back aren't designed for twisting; this kind of motion increases risk of injuring your discs and joints.

Carrying Luggage

- Carry bags on both sides of body instead of on one side. Try to keep weight equal on both sides.

Reaching

- Store commonly used items between shoulder and hip level.
- Get close to the item. Use a stool or special reaching tool, if you need to.
- Tighten your abdominal muscles to support your back. Use the muscles in your arms and legs (not your back) to lift the item.

Reaching Out

- When getting objects that are low, but not low enough to kneel or squat, brace yourself by placing hand on fixed object such as counter.

Overhead Cabinets

- Do not overreach to high positions.
- Step up on stool so overhead objects are lower.

Avoid Twisting

- Avoid twisting trunk to reach things.
- Step in direction of object you are trying to reach.

Pushing vs. Pulling

- Push rather than pull large or heavy objects.
- Make sure to lower hips and keep back stabilized by tightening abdominal muscles.

Moving Objects

- Keep elbows close at sides and use total body weight and legs to push or pull.

Sleeping

- Sleep on side or back. If you sleep on side, bend knees to take some pressure off back, put pillow between knees to keep curves aligned.
- Do not sleep on soft bed or couch. Takes three spinal curves out of alignment and adds extra stress to back. Avoid sleeping on stomach which can strain neck and back.

Around the House: Household Chores

Kitchen

- Do NOT get on knees to scrub floors. Use mop and long-handled brushes.
- Plan ahead! Gather all cooking supplies at one time. Sit to prepare meal.
- Place frequently-used cooking supplies and utensils where they can be reached without much bending or stretching.
- To provide better working height, use high stool, or put cushions on chair when preparing meals.

Bathroom

- Do NOT get on knees to scrub bathtub. Use mop or other long-handled brushes.
- ALWAYS use non-slip adhesive or rubber mats in tub.
- Attach soap-on-a-rope so it is within easy reach.

Safety Tips and Avoiding Falls

- Pick up throw rugs and tack down loose carpeting. Cover slippery surfaces with carpets that are firmly anchored to floor or have non-skid backs.
- Be aware of floor hazards such as pets, small objects, or uneven surfaces.
- Provide good lighting throughout. Install nightlights in bathrooms, bedrooms, and hallways.
- Keep extension cords and telephone cords out of pathways. Do NOT run wires under rugs — this is a fire hazard.
- Do NOT wear open-toe slippers or shoes without backs. They do not provide adequate support and can lead to slips and falls.
- Sit in chairs with arms. Makes it easier to get up.
- Rise slowly from either sitting or lying position to avoid getting light-headed.
- Do not lift heavy objects for first three months and then only with surgeon's permission.
- Stop and think and always use good judgment.

Dos and Don'ts for Rest of Your Life

Whether you have reached all recommended goals in three months, all spine surgery patients need to participate in a regular exercise program to maintain fitness and strength of muscles around their spine. With both your surgeon and primary care doctor's permission, you should be on a regular exercise program three to four times per week lasting 20-30 minutes. The aim of spine surgery is to return the patient to a full activity level, but conditions leading to spine surgery cannot be completely corrected by even the most successful operation, so certain precautions should be taken.

What to Do in General

- Avoid bending, lifting, and twisting as much as possible. It may be possible to return to strenuous physical activity, including heavy lifting, but discuss this with your surgeon.
- Maintain ideal body weight.
- DO NOT SMOKE!
- Maintain proper posture.
- When traveling, change positions every one to two hours to keep neck and back from tightening up.

Exercise – Do

- Choose low impact activity.
- Home program.
- Regular one- to three-mile walks.
- Home treadmill and/or stationary bike.
- Regular exercise at fitness center.
- Low-impact sports such as gardening, dancing, swimming, etc. **With clearance from you doctor.**
- Consult surgeon or physical therapist about specific sport activities.

Exercise – Don't

- Do not run or engage in high-impact activities or activities that require a lot of starts, stops, turns, and twisting motions.
- Do not participate in high-risk activities such as contact sports.
- Do not take up new sports requiring strength and agility until you discuss it with surgeon.

Section Four:

Appendix

Glossary

- **Annulus** – Outer rings of rigid fibrous tissue surrounding nucleus in the disc.
- **Anterior** – Relative term indicating front of body.
- **Bone Spur** – Abnormal growth of bone, usually present in degenerative arthritis or degenerative disk disease.
- **Cartilage** – Smooth material that covers bone ends of a joint to cushion bone and allow joint to move easily without pain.
- **Computed Tomography Scan (also called a CT or CAT scan)** – Diagnostic imaging procedure that uses combination of x-rays and computer technology to produce cross-sectional images, both horizontally and vertically, of the body. CT scan shows detailed images of any part of body, including bones, muscles, fat, and organs. CT scans are more detailed than general x-rays.
- **Congenital** – Present at birth.
- **Contusion** – A bruise.
- **Cervical Spine** – Part of spine that is made up of seven vertebrae and forms flexible part of spinal column. Cervical spine is often referred to as the neck.
- **Corticosteriods** – Potent anti-inflammatory hormones that are made naturally in the body or synthetically for use as drugs; most commonly prescribed drug of this type is prednisone.
- **Degenerative Arthritis** – Inflammatory process that causes gradual impairment and loss of use of a joint.
- **Degenerative Disc Dis**ease – Loss of water from discs that reduces elasticity and causes flattening of disks.
- **Disc** – Complex of fibrous and gelatinous connective tissues that separate vertebrae in spine. They act as shock absorbers to limit trauma to bony vertebrae.
- **Discectomy** – Complete or partial removal of ruptured disc.
- **Dura** – Outer covering of spinal cord.
- **Dural Tear** – Laceration or tear of dura that can occur during surgery. Leakage of spinal fluid occurs at this site. Often treated with bed rest for 24-48 hours thus allowing tear to heal.
- **Facet** – Small plane of bone located on vertebra.
- **Foramina** – Plural form of foramen (a natural opening or passage through a bone).
- **Foraminotomy** – Surgical procedure that removes part or all of foramen. Done for relief of nerve root compression.
- **Fracture** – Break in a bone.

- **Fusion** – Surgical procedure that joins or “fuses” two or more vertebrae together to reduce movement at this joint space. As a result, pain is lessened.
- **Herniated Disc** – Abnormal protrusion of soft disc material that may impinge on nerve roots. Also referred to as a ruptured or protruding disc.
- **Inflammation** – Normal reaction to injury/disease which results in swelling, pain, and stiffness.
- **Joint** – Where the ends of two or more bones meet.
- **Lamina** – Bone that lies posterior to the vertebrae.
- **Laminotomy** – Removal of a small portion of lamina.
- **Laminectomy** – Removal of entire lamina.
- **Ligaments** – Flexible band of fibrous tissue that binds joints together and connects various bones.
- **Lumbar Spine** – Portion of spine lying below thoracic spine and above the pelvis. This part of the spine is made up of five vertebrae. Also called the lower back.
- **Magnetic Resonance Imaging (MRI)** – Diagnostic procedure that uses combination of large magnets, radiofrequencies, and a computer to produce detailed images of organs and structures within the body.
- **Myelopathy** – Condition characterized by functional disturbances due to any process affecting the spinal cord.
- **NSAID** – Abbreviation for nosteroidal anti-inflammatory drugs, which do not contain corticosteroids and are used to reduce pain and inflammation; aspirin and ibuprofen are two types of NSAIDs.
- **Nerve Root** – Portion of spinal nerve that lies closest to its origin from the spinal cord.
- **Neuropathy** – Functional disturbance of peripheral nerve.
- **Nucleus Pulposis or Nucleus** – Relatively soft center of disc that is protected by rigid fibrous outer rings.
- **Osteoporosis** – Condition that develops when bone is no longer replaced as quickly as it is removed.
- **Osteophyte** – Bony outgrowth.
- **Pain** – Unpleasant sensory or emotional experience primarily associated with tissue damage.
- **Pain Threshold** – Least experience of pain that a person can recognize.
- **Pain Tolerance Level** – Greatest level of pain that a person is prepared to tolerate.
- **Paresthesia** – Abnormal touch sensation, such as burning or tingling.

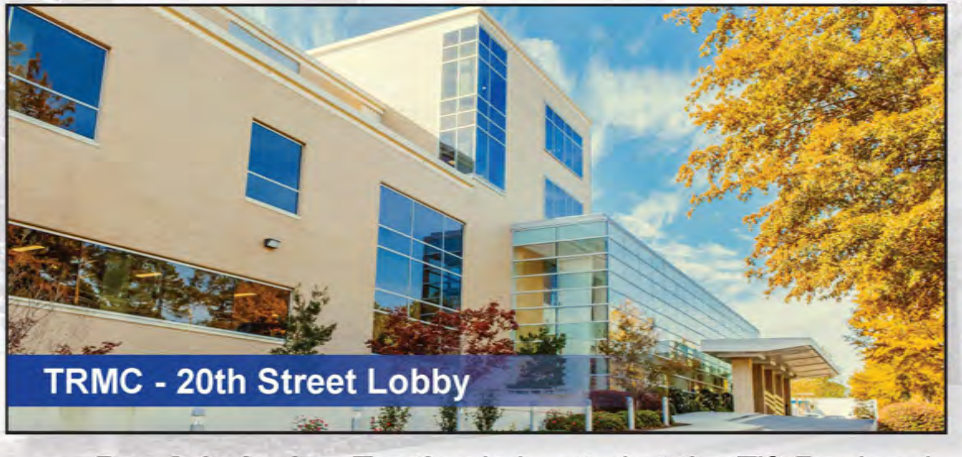
- **Posterior** – Relative term indicating that an object is to the rear of or behind the body.
- **Radiculopathy** – Condition involving the nerve root that can be described as numbness, tingling, or pain that travels along the course of a nerve.
- **Sacral Spine** – Last section of spinal column located below the lumbar spine. Made up of several semi-fused pieces of bone.
- **Sciatica (also called lumbar radiculopathy)** – Pain that originates along the sciatic nerve.
- **Scoliosis** – Lateral, or sideways, curvature and rotation of the back bones (vertebrae), giving the appearance that the person is leaning to one side.
- **Soft Tissues** – Ligaments, tendons, and muscles in the musculoskeletal system.
- **Spinal Stenosis** – Narrowing of vertebral canal, nerve root canals, or intervertebral formina of the spine caused by encroachment of bone upon the space. Symptoms are caused by compression of the nerves and include pain, numbness, and/or tingling.
- **Spine (also called spinal column or backbone)-** Series of stacked bones (vertebrae), discs and ligaments extending from the base of the skull to the small of the back that surround and protect the spinal cord and provide support to the upper body, chest, stomach and back. The cervical, thoracic and lumbar regions of the spine are composed of 24 articulating/flexible vertebrae.
- **Spinous Process** – Part of the vertebrae that you can feel through your skin.
- **Spondylosis (spinal osteoarthritis)** – Degenerative disorder that may cause loss of normal spinal structure and function. Although aging is primary cause, location and rate of degeneration is individual. Degenerative process of spondylosis may impact entire spine creating over growth of bone and affecting intervertebral discs and facet joints.
- **Spondylolisthesis** – Forward displacement of one vertebra over another.
- **Sprain** – Partial or complete tear of a ligament.
- **Strain** – Partial or complete tear of a muscle of tendon.
- **Stress Fracture** – Bone injury caused by overuse.
- **Tendon –** Tough cords of tissue that connect muscles to bones.
- **Thoracic Spine** – Portion of spine lying below the cervical spine and above the lumbar spine. This part of the spine is made up of 12 vertebrae.
- **Torticollis (or wryneck)** – Twisting of neck that causes head to rotate and tilt on an angle.
- **Transverse Process** – Wing of bone on either side of each vertebra.
- **Trigger Point** – Hypersensitive area of muscle or connective tissue, usually associated with myofascial pain syndromes.
- **Ultrasound** – Diagnostic technique which uses high-frequency sound waves to create an image of internal organs.

901 East 18th Street, Tifton, Georgia 31794

- ***Tift Regional Joint Replacement & Spine Center*** is located on Tift Regional Medical Center 2nd Floor

2227 Hwy 41 North, Tifton, Georgia 31794

- ***Georgia Sports Medicine*** located on the 1st Floor of the Musculoskeletal building.
- ***Pre-Op Class*** is located on the 3rd Floor of the Musculoskeletal building.



- ***Pre-Admission Testing*** is located at the Tift Regional Medical Center 20th Street Lobby.

Tift Regional
Joint Replacement
& Spine Care Center


Tift Regional Medical Center
(Main Campus)
20th Street
20th Street
20th Street
20th Street
Telecom
Lee Avenue
Goff Street
East 24th Street
Central Scheduling
DIABETES CENTER PATIENT/VISITOR PARKING
Security/ Diabetes Learning Center
Tyron Avenue
Lee Avenue
OUTPATIENT PARKING
Heart Center/Day Surgery Parking
HEART CENTER PATIENT PARKING
SURGEON PARKING
Physicians Center
Physicians Center Parking
PHYSICIAN/ ADMIN PARKING
PHYSICIAN PARKING
ADMIN PARKING
PATIENTS AND VISITORS ONLY PARKING
PATIENTS ONLY PARKING
18th Street
18th Street
18th Street
Old Ocilla Road
PATIENT PARKING
Patient Financial Services
Payroll/ Employee Fitness Center
Lee Avenue
Lee Avenue
John Orr Drive
MIDLEVEL PARKING
MIDLEVEL PARKING
Old Ocilla Road
Greenfield Drive
Greenfield Drive
Madison Avenue
John Orr Drive

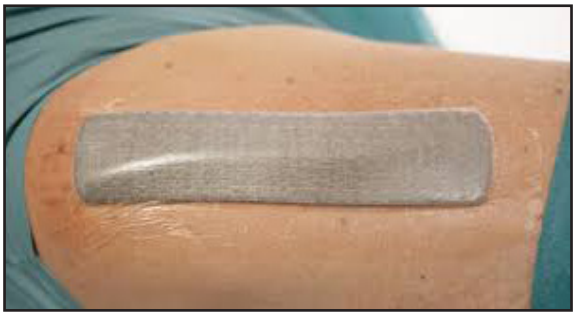
TIFT REGIONAL
JOINT REPLACEMENT
& SPINE CARE CENTER

Going Home with Mepilex Border Wound Dressing

- **Check your dressing every day.**
- **If your wound is draining or is painful,** lift the dressing edges carefully to look at the wound to make sure it is healing properly with no signs of infection.
- Signs of infection include:
  - New drainage, green or yellow or foul smelling from wound/drain site.
  - Increased and spreading redness around wound / drain site.
  - Increased temperature (fever) above 38°C or 101°F.
  - **Call your surgeon/General Practitioner (Family Doctor) if you have signs of infection.**
- If your wound has no signs of infection the dressing can be reapplied, as the border is made of a resealable silicone.
- Mepilex Border dressing can be left in place for up to a **maximum of 7 days** after application.
- **The dressing should be replaced if:**
  - The dressing pad is stained or wet beyond 80% (more than 3/4).
  - Drainage is seeping out into the border edges of the dressing.
  - The wound looks wet and white - like your skin does when it has been in water too long.
- Once drainage from the wound has stopped, the dressing can be peeled back and removed. The wound can then be left open to air even with the staples in.
- When applying ice with this dressing in place, your skin must be protected with a light cloth between the ice or icing device and the skin.

Changing the dressing if required

1. Wash your hands with soap and water.
2. Remove and dispose of old dressing.
3. Cleanse the wound with normal saline and gauze.
4. Open the new Mepilex Border dressing or gauze without touching the side that will be placed on your wound.
5. Place the dressing over the incision. Ensure you get a seal of the edges of the Mepilex Border by molding the entire bandage to your skin with your hands. If using gauze, loosely tape the gauze and do not wrap tape in a circle around the knee/leg.



Example: Mepiliex Dressing

Showering

- Mepilex Border is viral, bacterial and water resistant.
- You may shower with your Mepilex Border Dressing, but before getting into the shower you will need to **ensure the edges around the dressing are secure** by smoothing down the edges of the dressing.
- Mepilex Border dressing is water resistant but not waterproof. You may shower, but do not take a bath, go into pool or hot tub with this dressing.

Purchasing Dressings

- Patients are responsible to purchase additional dressings.
- Mepilex Border Dressings are available at some local pharmacies. Please call pharmacy of your choice to inquire about availability and prices.
- Alternatively, gauze and paper tape may be used.