

PATIENT INSTRUCTIONS:

Spinal Fractures

Surgical Technique

Spinal fractures can occur from simple trauma in the setting of osteoporosis, such as a minor fall or heavy lifting, or major trauma such as a motor vehicle accident. How a fracture is treated is dependent on many factors to be decided by your healthcare provider/surgeon. Fractures may require surgery if they are “unstable,” painful or causing spinal deformity. If surgery is not required, the fracture may be treated with an external brace or collar during the healing process and can range from 1-3 months or longer.

Please visit www.bch.org/bnsa for more information.

Treatment Options

Medical Treatment

If the fracture does not require surgery, you may be placed in an external brace. There are many different types of external braces, such as a rigid cervical collar, TLSO, rigid LSO, or Jewett brace. Brace immobilization may be required anywhere from 12 weeks or longer and will depend on many factors, such as your bone quality, the severity of the fracture, etc. External bracing usually helps to reduce pain and prevent spinal deformity during the healing process. There are instances when a fracture does not heal with bracing and ultimately requires surgery.

Surgical Treatment

More severe, complex, or “unstable” fractures may require surgical intervention. The specific type of surgery will depend on the type of fracture and location.

Thoracic and Lumbar Compression Fractures

Vertebroplasty or Kyphoplasty is a procedure that may be used to treat compression fractures in the thoracic or lumbar spine in patients that have osteopenia or osteoporosis. This procedure is often performed by a trained spine surgeon or interventional radiologist. During a kyphoplasty or vertebroplasty procedure, cement is injected into the fractured vertebra, and then no more bracing is required.

Fracture Follow Up

- The degree of pain can vary significantly. It is common for fracture pain to improve and decrease over time as the fracture heals.
- Routine imaging with X-rays may be ordered every 4-6 weeks to monitor the healing of the fracture and may help determine A: the length of time needed in the brace or collar and B: whether surgery may be required.

Activity Level

- Walking is the best exercise if tolerated.
- Avoid lifting more than 5 -10 pounds during the duration of being in the brace. This restriction may be slowly increased after you are cleared from your brace/collar.
- Avoid prolonged upright sitting or long car rides (more than 2 hours) while in the brace. It is recommended that patients do not sit for more than about 45 minutes without getting up and taking a 10-minute break and walking.
- You may drive as soon as it is comfortable to do so. You should not drive while under the influence of pain medications. It is not advised to drive if you are in a cervical collar, as this can impair your ability to turn your head safely.
- Limited bending or twisting of the spine is advised. If physical therapy has been prescribed, you are not to do a range of motion, flexion, extension, or lateral bending exercises unless cleared by your surgeon.
- Avoid activities with a potential for falling or physical contact until cleared by your surgeon.

Bracing

- For thoracic and/or lumbar fractures, you may be fitted with a custom brace from a local orthotics company. Some common types of braces required for patients include CTO, TLSO, rigid LSO, or a Jewett brace. Each brace type is designed to address specific fracture locations and patterns.
- If a cervical collar is prescribed, it is recommended to wear this at all times. You may be provided with a foam collar that can be worn in the shower.
- If a Jewett brace is ordered for a stable thoracic or lumbar compression fracture, you may be able to remove the brace when in bed or less than 30 degrees in bed. The removal of a brace needs to be approved by your treating physician.
- Any questions on the fit of your brace or collar should be answered from the company that fits you for your device.

Bathing

- If you have not undergone any procedures, it is okay to shower at any time.
- If you have a brace, you may remove the brace to shower but will need to avoid any bending or twisting while bathing.
- If you have a cervical collar, you will need to wear a foam collar or follow the directions of your surgeon.

Diet

- Narcotic pain medications can be very constipating. Be proactive with stool softeners and laxatives.
- A high fiber diet is recommended.
- Avoid straining on the toilet. Keep stools soft with a high fiber diet and/or use of prune juice, Metamucil, Fiber One cereal, etc.
- Drink plenty of fluids, including Gatorade, or any kind of juice to stay adequately hydrated, prevent blood clots, and other problems.

Pain Medications

- Do not take NSAID medications (Ibuprofen, Naprosyn, etc.) or Cox-2 inhibitors (i.e., Celebrex) for 3 - 6 months following surgery. These medications may delay or prevent proper healing of the fracture. If you have not had surgery, then it is okay to take NSAIDs medications.
- Tylenol can be taken as needed.
- Stronger pain medications will be prescribed if Tylenol is inadequate. Avoid letting the pain get out of control before taking medication, or it will be less effective.
- Muscle relaxants are often prescribed in combination with pain medications. These should be taken as directed by your provider.
- BNA providers will NOT refill pain medications after hours: 5 pm on weekdays or anytime on the weekend.
- It is crucial to anticipate the need for medication refills so that they can be refilled with adequate notification, which may take anywhere from 24 - 48 hours.

Follow-up

- Call Boulder Neurosurgical and Spine Associates (303-938-5700) to schedule your follow-up visits for your fracture (if it is not already scheduled).
- Additional follow-ups will be scheduled as needed. The duration of total follow-up with your surgeon depends on the progression and healing of your fracture.
- **Please call your surgeon's office immediately with any problems or go to the emergency room if you notice:**
 - Fever greater than 100.4° F
 - Difficulty swallowing
 - Difficulty breathing
 - Swelling and/or tenderness in your arms or legs
 - New pain and/or weakness in the arms or legs
 - Problem with controlling your bladder or bowels

Other FAQs

How long will I be in the hospital? This varies depending on the type of fracture, how it is treated (brace versus surgery), pain control, and your progress with therapies.

How much time off from work? The amount of time needed to recover prior to returning to work varies and depends on the fracture type, your job requirements, and you as an individual. Patients should ask their surgeon for individual recommendations. The return to physically demanding jobs will be at the discretion of your surgeon and may delay your return to work.

When can I resume driving? Driving is acceptable, depending on the use of pain medication. We strongly advise against driving while taking any sedating or narcotic pain medications. We advise against driving in a rigid cervical collar because it requires excessive turning of the head and neck.

Will I need Physical Therapy? We usually recommend physical therapy and will refer you to a therapist after your fracture has healed, and you have been removed from your brace. Limited bending or twisting of the spine is advised. If physical therapy is prescribed, you are not to do range of motion, flexion, extension, or lateral bending exercises until cleared by your surgeon. Refrain from high impact activities such as running, horseback riding, or any radical side-to-side motions. A good rule is: "if it hurts, don't do it."

What kind of follow-up is required? Patients return to our office for routine follow-up appointments at intervals that are determined on a case-by-case basis. We typically see patients back in the office within 4-6 weeks following a fracture and then determine subsequent visits. The follow-up schedule will be determined by your surgeon at each follow-up visit.

Will I need antibiotic prophylaxis for dental procedures? Not unless you have undergone a procedure to stabilize the fracture. In this case, we recommend avoiding routine dental procedures for 3 months following surgeries in which hardware is placed. This includes any dental work. You should brush your teeth as you normally do. If you must have a dental procedure within 3 months, then it would be advisable to use antibiotic prophylaxis. We generally do not make recommendations about the choice of antibiotic when using it for prophylaxis, and we usually defer this to your primary care physician or your dentist. After 3 months, prophylactic antibiotics are not recommended except for specific individuals with extenuating circumstances, such as patients who are at risk for infective endocarditis. If you have not had any surgery, then no antibiotics are recommended.