

## PATIENT INSTRUCTIONS:

# Vertebral Augmentation (Kyphoplasty)

## Surgical Technique

Vertebral augmentation or kyphoplasty with cement is a minimally invasive technique typically performed for osteoporotic compression fractures, painful tumors of the spine, or non-healing compression fractures caused by a fall or other trauma. We usually offer this procedure to patients who fail initial attempts to treat their pain with other non-operative treatments, such as bracing and bed rest. The goal of surgery is to stabilize the affected bone so that pain relief is achieved. Please visit [www.bch.org/bnsa](http://www.bch.org/bnsa) for more information.

## Before Surgery

- Seven days prior to surgery, please do not take any anti-inflammatory NSAID medications (Celebrex, Ibuprofen, Aleve, Naprosyn, Advil, Aspirin, etc.) as this could increase your risk of bleeding during surgery.
- If you are taking any blood-thinning medications (Plavix, Coumadin, etc.), please talk to the prescribing doctor about when you can safely stop that medication before surgery to reduce your risk of bleeding. Usually, these medications are stopped anywhere from 3 - 7 days before surgery.
- Be aware that nicotine users have a significantly higher risk of surgical wound complications, such as healing and infection, as well as increased surgical bleeding. Nicotine disrupts many normal body functions, including nutrients and blood supplies.

## Day of Surgery

- Be early or on-time to check-in on the day of surgery so that surgery is not delayed or canceled.
- Bring your hospital surgical folder and any related paperwork (consents, etc.) to surgery.
- Bring a copy of all relevant imaging studies (CT, MRI, or x-rays) to surgery, even if your surgeon has already seen them in the clinic or may have a copy. Surgery may be canceled if your surgeon cannot view your radiographic images on the day of surgery.

## After Surgery

### Activity Level

- Walking is the best exercise after surgery because it strengthens the back and leg muscles, increases endurance, relieves stress, improves blood flow, keeps the bowels moving, and prevents fluid from building up in the lungs.
- Immediately after surgery, patients are encouraged to walk with gradually increased distances. The sooner patients can be active, the sooner he/she may be able to resume their routine.
- There are no restrictions following surgery except the recommendation for patients who suffer from osteoporosis, in which case we recommend lifting no more than 20-30 pounds to prevent future fragility fractures.
- Avoid prolonged upright sitting on hard surfaces or long car rides (more than 2 hours) for 2 - 4 weeks. 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.
- Avoid activities with a potential for falling or physical contact until cleared by your surgeon.

### Brace

- There is typically no bracing recommended following this procedure.

### Bandage

- If a bandage is present, it should be changed the second day following surgery. A clean, dry gauze is recommended to be changed over the wound daily to protect the incision from clothing and collar (if used) to prevent breakdown. The use of a bandage is usually discontinued once your incision is fully healed. This may be different according to your surgeon.
- Depending on your surgeon's preference, you may have either Steri-Strips, a liquid skin adhesive (Dermabond), or external sutures over your incision.
- Steri-Strips: should be left intact until returning to the clinic for your postoperative follow-up visit 2 - 3 weeks following surgery.
- Liquid skin adhesive (Dermabond): should be left in place and will eventually fall off naturally over the next 10-14 days. Do not peel the glue off prematurely.
- External sutures: need to be removed 2 - 3 weeks after surgery.
- Do not use topical ointments on your incision unless approved or directed to do so explicitly by your surgeon.

### Bathing

- We recommend waiting to shower until the third day after surgery.
- Try to limit showers to no more than 5 - 7 minutes.
- Do not scrub the incision directly. Instead, let the clean water run over the incision and then pat the incision dry.
- Do not soak in a bathtub, hot tub, or pool until you are cleared to do so by 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

- NSAID medications (Ibuprofen, Naprosyn, etc.) or Cox-2 inhibitors (Celebrex, etc.) are encouraged after this procedure as they will provide the best anti-inflammatory and pain relief in most cases.
- 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.
- 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 an adequate notification, which may take anywhere from 24 - 48 hours.

## Follow-up

- Call Boulder Neurosurgical and Spine Associates (303-938-5700) to schedule a postsurgical visit after surgery (if it is not already scheduled). Sometimes no follow-up is needed if a patient has an excellent resolution of their pain.
- Additional follow-ups will be scheduled as needed. The duration of total follow-up with your surgeon depends on the type of surgery being performed.
- **Please call your surgeon's office immediately with any problems or go to the emergency room if you notice:**
  - Drainage and/or increased pain at the incision site
  - Fever greater than 100.4° F
  - Difficulty swallowing
  - Difficulty breathing
  - Significant wound swelling
  - 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?** You will likely go home on the day of the surgery. We have found that patients generally prefer the comforts and support that home offers. The sooner you go home, the lower your risk of complications such as hospital-acquired wound infections, blood clots, and urinary tract infections.

**How much time off from work?** The amount of time needed for recovery prior to returning to work varies depending on the surgery, your job, and you as an individual. Typically, 1- 2 weeks for jobs that are at a desk or sedentary is sufficient, but patients should ask their surgeon for an individual recommendation. The return to physically demanding jobs will be at the discretion of your surgeon.

**When can I resume driving?** Driving is acceptable, depending on the use of pain medication. We strongly advise against driving while taking narcotic pain medications following the surgery.

**Will I need pain medications?** We will prescribe pain medications and other peri-operative medications on the day of surgery or prior to your discharge from the surgery center or hospital.

**Will I need Physical Therapy?** If physical therapy is recommended, we will refer you to a therapist at your first postoperative visit.

**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 1 - 2 weeks following surgery and then increase this interval with subsequent visits. The follow-up schedule will be determined by your surgeon at each follow-up visit. If you have excellent pain relief from the procedure, then you may not need a follow-up visit.

**Do I need antibiotic prophylaxis for dental procedures?** No.