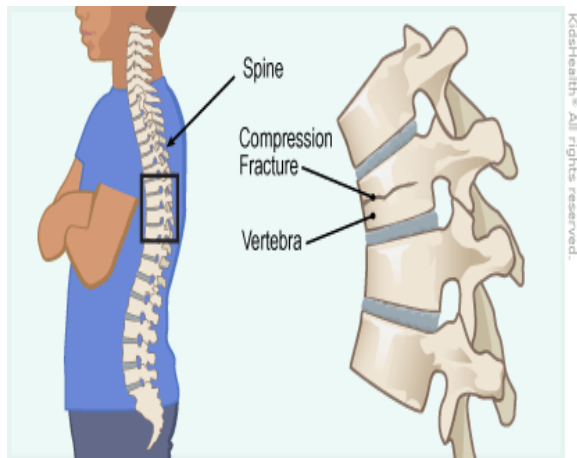


Patient Guide to Kyphoplasty



Introduction

Compression fracture of the spine occur when the spinal bones, or vertebrae cracking under pressure causing them to compress and collapse in height. Although this is most commonly seen in patient with osteoporosis, softening of the bones, this can also occur as result from a high impact injury as well. These fractures can cause the spine to angle forward causing kyphosis, or a hunchback.

Kypholasty is a procedure that used to treat compression fractures. Not only does kyphoplasty help alleviate pain, it also helps to restore the height of the fracture or compressed vertebrae. The majority of patients get near immediate relief of pain after this procedure.

Rationale

Why would your surgeon recommend a kyphoplasty?

Acute compression fractures of the spine can cause significant discomfort and can lead to permanent deformity of the spine. In these cases, kyphoplasty is used to treat these fractures in a minimally invasive way. This procedure is an excellent alternative to open spine procedures which have been used in the past. Kyphoplasty is performed through a small hole in the skin which decreases risks of postoperative complications.

Preparation

How do I prepare for surgery?

Once you have made the decision with your surgeon to precede with surgery, there a several things to do to prepare for surgical intervention. Your surgeon may require that you get a medical clearance from your primary care physician.

All patients undergo a preoperative evaluation at the hospital. The purpose of this is to get baseline laboratory work as well as to discuss medications. You will discuss some suggested modifications that may be needed at home to help with your recover. You will be advised as to what medications to take the morning of your procedure as well as a cleanser to help with sterility.

Risks and Complications

What can go wrong?

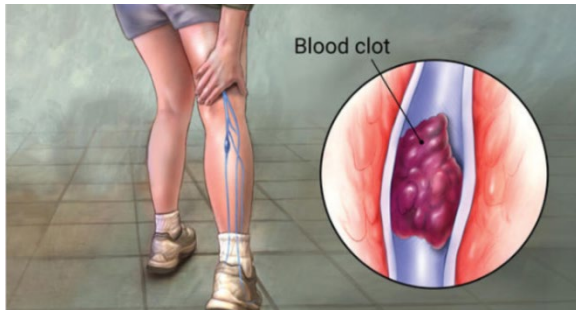
There are risks and complications to any type of surgical intervention. Provided is a list of the most common complications involved with your procedure:

- Anesthesia Complications
- Deep Vein Thrombosis (DVT)
- Infection
- Cement Leakage

Anesthesia Complications

All major surgical procedures require some form of anesthesia and these options will be discussed in greater detail with that time prior to surgery. There are some patients who have difficulties with anesthesia. It is important that you discuss any previous adverse reactions/complications that you have previously had with your anesthesiologist.

Deep Vein Thrombosis (DVT)



There is increased risk of a DVT with any surgery however surgeries on the hip, pelvis and knee are most common. Secondary to decreased activity postoperatively, a blood clot can form in one of your extremities which can dislodge and travel to the lungs to form a pulmonary embolism which can be life threatening. A DVT is characterized by pain, swelling, and warmth of the calf

most often. Secondary to the severity of this, we take several precautions to avoid this:

- Early ambulation is key
- Anticoagulants
- TED hose

Infection

This is a potential complication for any surgery however in a total knee replacement this is a very serious complication. Infections in a total joint replacement can lead to subsequent surgeries or sepsis (infection in blood stream). You will receive antibiotics prior to surgery and 24 hours after surgery. You will also need to have prophylactic antibiotics before any dental procedures

Cement Leakage

Cement is used during the kyphoplasty procedure to restore the compressed vertebrae back to its native height. It is initially introduced into the vertebrae in liquid form prior to hardening. The cement is injected at a lower pressure so this complication is rare and when this occasionally does occur it does not typically cause any problems.

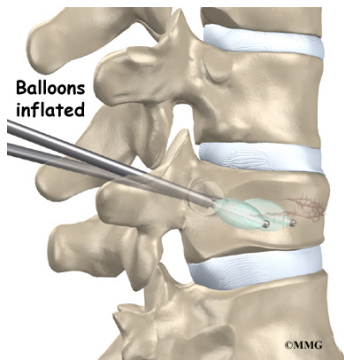
Rarely, cement can leak and cause compression on spinal cord or nerves which can cause pain and alterations in function of these nerves. In these cases, this can cause the need for surgery to remove the cement that was leaked.

Surgical Procedure

Patient will be undergo general anesthesia then will be placed into a prone position, meaning that they will be placed onto their stomach. Before the procedure begins, patient back with be prepared with an antiseptic and sterile drapes will be placed.

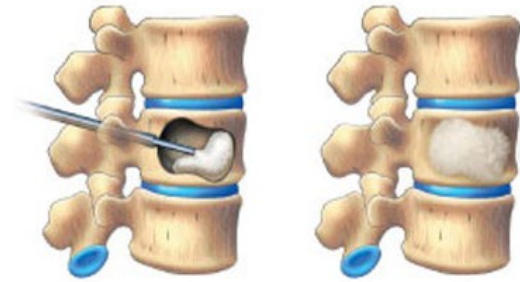
There will be 1-2 small incisions made over the affected area of the back on x-ray has confirmed the correct location of the fracture. A long needle will then be placed into the spine at the fractured vertebrae and once again location is confirmed by x-rays. A small drill is then used in these needles to drill holes for access.

Once the drill is removed, a small tube with an inflatable balloon which is attached to the tube is then inserted into the needle. The balloon is then inflated to help restore the height of the vertebral body.



To finish the procedure, the balloon is then deflated and a syringe is placed into the needle to transfer the cement into the affected vertebrae. X-rays are used to confirm placement and asses for cement leakage. Cement is given time to harden then all instruments are removed and

sterile dressing are applied.



After Surgery

After surgery you will be held in recovery for approximately 30-45 until it is felt that you are stable to be transferred to the surgical floor. You can expect to stay in the hospital for 1 night depending on your recovery. Dressing can be changed in 72 hours postoperatively.

Patient will follow-up in clinic 2 weeks postoperatively for evaluation of the incision and pain. X-rays will be obtained at this visit to assure that fractured vertebrae is maintaining restored height.

