

Thoracic or Lumbar Compression Fracture

Patient Packet





Diagnosis: Compression Fracture

What is it?

When the building blocks of the spine (vertebral bodies) break and collapse (compression fracture) causing decreased height of the vertebral body



More common in boys due to higher activity levels and sports injuries.



Most common from trauma but can also be from infection, cancer, or arthritis.

Is it Harmful?

surgery and typically heals on its own within 4 to 6 weeks, although it may take up to 3 months for full recovery. However, if the fracture is pressing on the spinal cord or nerves, or if it involves more than just the vertebral body, it can become unstable and lead to complications such as weakness or issues with bladder and bowel control.



What is the Treatment?

For stable fractures, conservative management is typically recommended. This may include rest, pain medication, and physical therapy to promote healing and manage discomfort. In some cases, your child may also be fitted with a back brace, such as a TLSO (Thoracolumbosacral Orthosis) brace, to provide additional support and stability during recovery. On the other hand, if the fracture is unstable, surgery may be necessary. In such cases, spinal fusion surgery may be performed to stabilize the spine and ensure proper healing.

TLSO Brace

What is it?

A TLSO brace (Thoraco-Lumbo-Sacral Orthosis) is a type of back brace designed to provide support to the thoracic (upper back), lumbar (lower back), and sacral (pelvic) areas.



The TLSO helps to stabilize the spine, reduce pain, and improve posture by restricting excessive movement in the trunk, allowing bones and muscles to heal properly.

What does it do?

• Provides support: Helps to stabilize and support the spine, promoting proper alignment and reducing strain on injured areas.



- Limits movement: Restricts unnecessary movement in the back to prevent further injury and facilitate healing.
- Reduces pain: Helps to alleviate discomfort or pain by limiting the movement of the spine and encouraging proper posture.
- Aids in recovery: Encourages healing following surgery or injury by preventing spinal deformities or misalignment.

Why is it Important?



- Healing: Helps prevent further injury to the spine and facilitates the healing process.
- Posture control: Encourages correct spinal alignment, which can reduce strain on muscles and joints.
- Pain relief: Offers support to areas of the spine that are prone to discomfort or pain.
- Prevention of complications: Wearing the brace as instructed ensures that the spine remains stable, preventing complications from developing during recovery.

6 Steps on how to wear the TLSO Brace

Prepare the Brace

- Ensure the TLSO is clean and free from any dirt or debris.
- If your child's brace has straps or fasteners, make sure they are in working order and easy to adjust.
- Wear a tight, clean Tshirt underneath. If needed, can wear a sports bra.

Adjust for comfort

 After securing the brace, check that your child can breathe comfortably and move with ease (within the range allowed by the brace). There should be no feeling of excessive restriction.

Position the Brace

- Correct positioning:
 Position the brace around your child's torso, making sure that the back part of the brace sits along the spine. The top part should be under the armpits and the bottom part should rest comfortably on the hips.
- Check for proper fit:
 Ensure the brace is not too tight or too loose. It should be snug but not cause any discomfort or restrict breathing.

5 Double check for fit

 Ask your child to stand up and check their posture. The brace should support the spine without causing discomfort. Make sure it stays in place and doesn't shift during normal movements.

Secure the Straps

- If the brace has straps, secure them in the correct order, usually starting from the bottom and moving upwards. Ensure that each strap is tightened comfortably without causing pinching or discomfort.
- Check that the straps do not dig into your child's skin or create pressure points.

Monitor skin and comfort

 Check the skin underneath the brace regularly for any signs of irritation, redness, or sores. If you notice any skin issues, contact the doctor for guidance.

Recovery & Follow-Up



ACTIVITY RESTRICTIONS

- 1-2 weeks after injury: Light, non-impact activities like walking/swimming
- 2-4 weeks: Gradually reintroduce low-impact activities that don't put stress on the spine
- 4-6 weeks: If pain-free and regained strength/mobility, can return to non-contact sports and stop bracing
- 12 weeks: If completely pain-free w/ normal movement/strength/stability, can return to contact sports

HOME CARE

Can return to school when pain is controlled.

No backpacks or PE/sports.

FOLLOW-UP

- 6-weeks: X-rays while standing up
- 12-weeks: X-rays while leaning forward/backward to see if any movement of the spine (instability)



LONG-TERM CARE

Watch out for symptoms that indicate injury to the spinal cord/nerves

- Persistent or worsening back pain that doesn't improve with rest or treatment.
- Leg pain, numbness, tingling, or weakness
- Changes in bladder or bowel function, such as incontinence or difficulty urinating