

Transverse Process Fracture

A transverse process fracture is a serious injury but not considered dangerous or life threatening. They can occur to any vertebra in the spine. The middle part of the back and the lower part of the back are common areas. These fractures are often caused by a high-velocity accidents, such as falling from an elevated height or being in a car accident, so it is possible there may be other injuries which could be life-threatening.

Men tend to experience fractures four times more often than what women do. Seniors are also susceptible to these injuries due to their bones being weaker from osteoporosis.

Transverse process fractures are relatively uncommon. It normally results from rotating or extreme lateral bending. Most of the time, it doesn't affect stability.

Many people refer to the fracture as a "broken back" or "fractured vertebra", which technically it is, as a part of the vertebra has fractured. However, the fracture does not interfere with the spinal cord, and so this injury would be very unlikely to cause any nerve problem. However, if the trauma is large enough and other vertebrae have also been fractured or dislocated then of course spinal cord injury is a possibility. However, an isolated transverse fracture is not so serious.

Transverse Process Fracture Anatomy

The spine is composed of a number of small bones, referred to as vertebrae, which are all stacked one on top of the other. Ligaments, nerves, muscles and intervertebral discs are all additional components of the spine.

Vertebrae connects to create a canal that shields and protects the spinal cord. It is composed of three distinct sections creating natural curves in your back: chest area (thoracic), curves of the neck area (cervical) and lower back (lumbar). The lower part of the spine is composed of vertebrae fused together. Five lumbar vertebrae join the pelvis and the spine together.

Spinal nerves travel along the spinal canal to carry messages between the muscles and the brain. The nerves will branch out from the spinal cord out of the vertebrae openings.

The transverse process is a projection of bone that extends from the side of the vertebra. There is one each side. There is also a projection of bone that extends from the back of the vertebra called the spinous process.

How to Treat a Transverse Process Fracture:

1. Nonsurgical Treatment

Most of the spinal injuries can be treated by wearing a brace for six to twelve weeks. Slowly increasing physical activity and engaging in rehabilitation exercises can help the majority of people avoid any problems after the injury.

2. Surgical Treatment

Surgery is only required in a few different instances, such as when:

- Vertebral body height is severely lost
- Excessive bending or angulation at the site of the injury occurs
- Significant nerve injuries in parts of the vertebral body or pinching of disks in the spinal cord is present

- A significant amount of fracture fragments are present

In the aforementioned cases, the spinal canal has to be decompressed and stabilized. Decompression often involves removal of the bones or other components that are putting pressure on the spinal cord.

Tips:

- Regardless of whether you undergo surgery or not, you will need to go through a period of rehabilitation after the injury has healed.
- Rehabilitation helps to reduce pain, regain movement and allow you to return to the same state you were before the injury occurred.
- Severe pain that grows worse with movement needs to be evaluated right away.
- Follow the advice of your therapist to improve your recovery.