![McMaster Children's Hospital logo]

Tethered Cord

Information for parents from the Pediatric Neurosurgery team
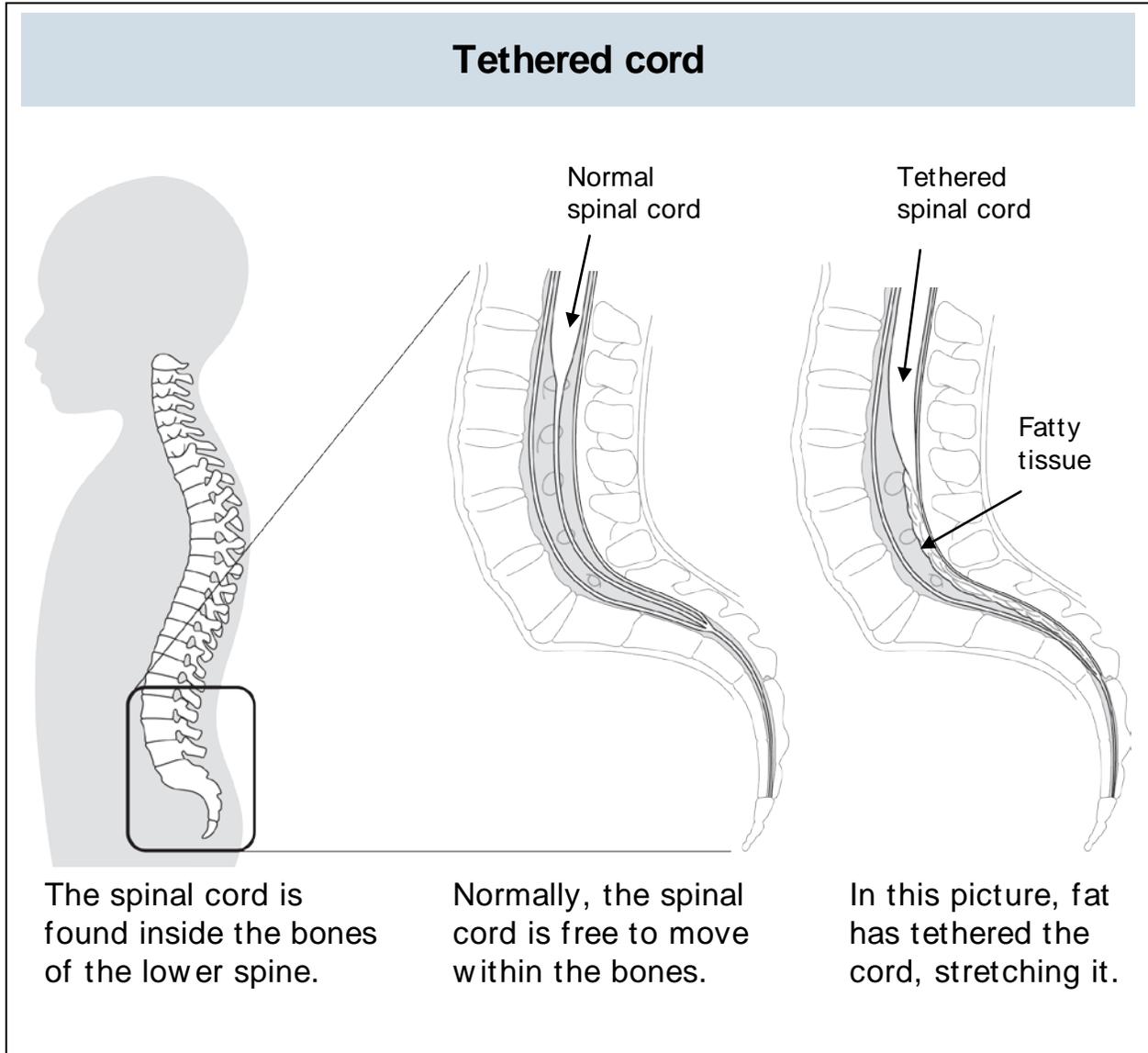
What is tethered cord?

As a baby grows, the bones surrounding the spinal cord grow bigger, but the spinal cord remains the same length. For this to happen, the spinal cord must be free to move within the bones.

In some children, the bottom of the spinal cord is tethered (tied down) and not able to move freely. As the child grows, the spinal cord becomes stretched. When stretched, the spinal cord cannot carry messages between the brain and body properly, causing problems for the child.

What causes a tethered cord?

We do not always know the cause of a tethered cord. It can be present at birth (congenital), occur with a form of spina bifida, or happen because something catches the spinal cord and holds it down. The spinal cord can become caught due to a tight ligament, a scar, bone or fat.

Tethered cord

Normal
spinal cord

Tethered
spinal cord

Fatty
tissue

The spinal cord is
found inside the bones
of the lower spine.

Normally, the spinal
cord is free to move
within the bones.

In this picture, fat
has tethered the
cord, stretching it.

What are the signs of tethered cord?

Signs of tethered cord include:

- Back pain
- Leg pain
- Weakness or numbness in the legs and feet
- Difficulty standing or walking
- Lack of bladder control
- Lack of bowel control
- Curving of the spine

How is tethered cord diagnosed?

The diagnosis of tethered cord is made after examining your child and reviewing the results of tests that look at the spinal cord and spine, such as Magnetic Resonance Imaging (MRI) or ultrasound.

If your child is also having problems passing urine (peeing), he or she will visit a Urologist to get a better understanding of the problem.

When we have the information from the tests and other doctors, we will see you in the Pediatric Neurosurgical Clinic to review the results, and discuss the findings and what this means for your child.

How is tethered cord treated?

Tethered cord can be treated with surgery to release the stretching of the spinal cord. If surgery is recommended for your child, the Pediatric Neurosurgical team will give you more information about the operation and your child's care.

If you have questions or need more information, please talk with a member of the Pediatric Neurosurgery team