UNDERSTANDING TETHERED SPINAL CORD SURGERY

WHAT IS A TETHERED SPINAL CORD?

The spinal cord includes the bundle of nerves that controls leg movement and sensation as well as bladder function. It typically divides into small nerve roots at the L2 vertebral body. During development of the spinal cord, tissue and fat, or other body elements that do not belong near the spinal cord can become attached to the spinal cord.

Sometimes the tissue prevents the normal development of the spinal cord so that there are problems with urination and leg weakness. In most cases, there are no problems at birth. As the body grows, however, the spinal cord then becomes stretched and damaged by the abnormal attachment.

This condition is called a tethered spinal cord. If left untreated, your child may suffer nerve damage as he or she grows. The condition can be treated with surgery to prevent future nerve damage.

SIGNs AND SYMPTOMs

Tethered cord can include the following:

- A crooked toe
- A crooked crease between the buttocks
- A dimple above the gluteal crease (the crease in the buttocks)
- A lump of the lower back
- Long hair (longer than 1 inch) growing on the back over the spine

• Stumbling or changes in gait or walking
• Pain or tingling the legs or back
• Curvature of the spine
• Trouble with bowel or bladder control, such as:
  » Difficulty in toilet training a toddler
  » Keeping a dry diaper with a baby
  » Losing bladder control in a toilet-trained child
  » Not being able to hold urine before getting to the bathroom
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DIAGNOSING TETHERED SPINAL CORD

Diagnosing tethered spinal cord is done by performing an MRI of the spine at Children's Hospital Oakland. The procedure takes approximately 30-60 minutes.

Because the patient must be still for the entire study, your child will have the test with anesthesia. Anesthesia is administered by a board-certified Children's Hospital pediatric anesthesiologist who only performs pediatric cases.

Your child should be able to go home after the procedure.

Your child's neurosurgeon will then review the MRI and contact you to come in to discuss the plan of care. Please write down any questions to help you remember them at your visit.

AFTER THE SURGERY

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<td>• For the first 12-48 hours after surgery, your child must remain flat in bed. He or she can have a pillow but do not raise the head of the bed. This allows the covering of the spinal cord to seal so spinal fluid does not leak into the space under the skin.</td>
<td>Your child's comfort is very important to everyone caring for your child. • Your child may be given three medications to help minimize pain: - A continuous dose of Motrin administered through an IV for the first 48 hours - Morphine - Tylenol (oral) • You know your child the best, so if you think your child is having any discomfort, tell your nurse. • By the time your child goes home, he or she will only need oral pain medication.</td>
<td>A bandage will be over the surgical incision after surgery. There is no care required for the bandage it may stay on after your child leaves the hospital. There is no need to change it. When the bandage starts to come off, you may remove it. You will see steri-strips covering the incision area. These strips should remain on the incision until the post-op appointment with your child's neurosurgeon. Please call if you see: • Fluid leaking from the wound • Any swelling</td>
<td>After surgery, the team will examine the wound. If the wound looks good, the bladder tube will be removed and your child can get up. Let your child determine the level of activity comfortable for him or her. If your child feels well overnight (no vomiting, fever and pain is controlled), your child can usually go home on the second day after surgery. A longer stay is needed for complex tethered cord surgeries.</td>
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