

HELPFUL Information for parents and children

# Hematology/Oncology

## THERAPEUTIC SPINAL TAPS

AT CHILDREN'S HOSPITAL OF PITTSBURGH OF UPMC, we believe parents and guardians can contribute to the success of this treatment and invite you to participate. Please read the following information to learn about the procedure and how you can help.

## Fast Facts About Spinal Taps

- There are two types of spinal taps: those used as diagnostic tests and those used as therapeutic procedures.
  - When used only to take out fluid surrounding the spinal cord for cell counts or examinations, they are diagnostic spinal taps.
  - When used to inject medication into the fluid surrounding the spinal cord, they are therapeutic spinal taps.
- The following information is about therapeutic spinal taps.
- Each spinal tap takes about 30 to 60 minutes, followed by 30 minutes of rest.
- Your child will receive sedation medication to help him or her relax and lessen any pain he or she might feel.
- Your child may resume a normal diet and activities afterwards, although he or she may experience some soreness for a day or so.

## Fast Facts About Sedation

- Sedation (se-DAY-shun) means that your child will be given medication to make him or her very drowsy and relaxed during the procedure.
- This kind of medication is used when your child does not need to be sound asleep for the procedure, but needs to be very calm for it.
- Although not fully asleep, your child will not feel any pain during the procedure or remember it afterwards.
- The doctor doing your child's procedure will give the sedation medication.

## What Is A Spinal Tap?

Spinal taps allow chemotherapy drugs to enter your child's central nervous system, which is not possible when the drugs are injected into your child's veins.

- Spinal taps are used to give chemotherapy drugs to patients with leukemia or other cancers to prevent or treat the spread of cancer to the brain or spinal cord.
- A spinal tap involves an injection with a special needle into your child's lower back.



## Home Preparation

When sedation is needed, there are important rules for eating and drinking that must be followed in the hours before the treatment.

#### For children older than 12 months:

After midnight the night before the test, do not give any solid food or non-clear liquids. That includes milk, formula, juices with pulp, coffee and chewing gum or candy.

#### For infants under 12 months:

- Up to 6 hours before the **scheduled arrival time**, formulafed babies may be given formula.
- Up to 4 hours before the scheduled arrival time, breastfed babies may nurse.

#### For all children:

- Up to 2 hours before the scheduled arrival time, give only clear liquids. Clear liquids include water, Pedialyte<sup>®</sup>, Kool-Aid<sup>®</sup> and juices you can see through, such as apple or white grape juice.
- Medications may be taken with clear liquid up to 2 hours before the scheduled arrival time.

In the 2 hours before the scheduled arrival time, give nothing to eat or drink.

### THERAPEUTIC SPINAL TAP cont'd

## Before the Spinal Tap

Spinal taps are done at the Division of Pediatric Hematology/ Oncology of Children's Hospital. (They also may be done while your child is a patient in the hospital.) After you have registered your child at the Pediatric Hematology/Oncology Registration Desk, you will be asked to sit in the waiting area.

We invite one parent or guardian to stay with your child during the treatment. Other adults and siblings must stay in the waiting room during the procedure.

- You and your child will be called to the examining room and asked some screening questions by one of the doctor's assistants. The assistant will take your child's vital signs, weight and medical history. As the parent or legal guardian, you will be asked to sign a consent form for the sedation medication to be given.
- You may ask any questions or discuss concerns about your child's treatment at this time.
- Your child may wear normal clothes to the procedure.
- Your wait time will vary, depending on how many children are being seen that day and the type of procedure that has been ordered for your child. Since every child is different, the length of time needed to do each treatment also will vary. Please be patient with the medical staff.

## The Spinal Tap

You will be joined in the examining room by a doctor and one or two assistants who will work with your child and do the spinal tap. The doctor may be wearing a mask, gown and gloves; the assistants may be wearing them, too.

- If your child does not already have a central venous catheter (such as a Mediport or Broviac), an intravenous (*in-tra-VEE-nus*) or IV line will be placed into a vein in your child's arm.
- During the treatment, medicine will be given to relax your child and lessen any pain he or she might feel. It also will keep your child from remembering the spinal tap afterwards. This medication will take effect very quickly.
- Your child will be asked to lie on his or her side with knees pulled up to the chest, and to stay still during the procedure.
- During the test, your child's heart rate, blood pressure, temperature and blood oxygen level will be checked continuously. A blood pressure cuff around the upper arm and a small fingertip clip will be used. They will not cause any pain.
- Your child may keep his or her clothes on during the procedure, but pants and underwear may need to be loosened and lowered slightly so that the doctor can reach the lower back.
- The doctor will clean the area with a brown liquid and then use another wipe that will numb the area before the spinal tap.

- The doctor will carefully insert a needle into the spinal canal. The doctor will then collect a small amount of fluid (about a teaspoon) to make room for the chemotherapy medicine.
  - The doctor will attach a syringe to the needle to inject the chemotherapy medicine.
    - Your child may react as if he or she is uncomfortable during the treatment. This reaction will stop once the needle is taken out. Please remember that while your child may seem to be awake and uncomfortable, the IV medication will keep him or her from remembering any pain later.

## A Parent's/Guardian's Role During the Spinal Tap

The most important role of a parent or guardian

during the procedure is to help your child stay calm and relaxed. The best way to help your child stay calm is for you to stay calm. Although your child may seem to be uncomfortable, rest assured that the medication will keep him or her from remembering any pain from the treatment.

- You may stay near your child and hold his or her hand for comfort during the treatment.
- You may bring along a "comfort" item—such as a favorite stuffed animal or "blankie"—for your child to hold during the spinal tap.
- Please follow the instructions of the medical team and do not distract them or interrupt the treatment in any way.
- We welcome your questions, but please ask them either before or after the treatment.

## After the Spinal Tap

When all the medication has been injected, the therapeutic spinal tap is done.

- After the procedure, your child will be asked to rest lying down for about 30 minutes.
- Band-aids will be placed on the spots where the needle was inserted. They can be removed the next day.
- Your child may be tender or sore in the area where the chemotherapy medication was injected. If so, he or she may take a mild pain reliever, such as Tylenol® or acetaminophen.
- Your child may seem groggy after the treatment because of the IV medication. The length of time it will take the medication to wear off will vary, as some children take longer than others to become alert.
- Your child may resume normal eating and drinking at the rate he or she is comfortable with when you get home.
- Your child should rest quietly at home for the rest of the day and overnight. He or she should also not drive a car or ride a bike or scooter for the rest of the day.
- The doctor will explain what was done during the treatment, and will be available to answer any questions you might have.

## THERAPEUTIC SPINAL TAP cont'd

## Special Needs

If your child has any special needs or health issues you feel the doctor performing the procedure needs to know about, please call the Division of Pediatric Hematology/Oncology at Children's Hospital of Pittsburgh *before* the procedure and ask to speak with a nurse. It is important to notify us in advance about any special needs.

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To see the list of all available patient procedures descriptions, please visit **www.chp.edu/procedures**.