Desensitization Techniques for Persistent Nerve Pain

What is the role of physical and occupational therapy in treating persistent nerve pain?

Physical and occupational therapists evaluate your child's pain and teach techniques called “desensitization.” These techniques help reduce the effect of pain on your child and their ability to do daily activities, like wearing shoes and socks on the foot that has pain.

How do desensitization techniques work to treat pain?

Often with persistent nerve pain, as you have more pain, your body works less well (this is called the pain-function cycle). Desensitization techniques help break that cycle. When your brain gets different sensations, it begins to feel pain more normally. Over time, the pain will decrease as your child uses that body more and the sensations feel more normal.

Desensitization treatments to do with your child:

Below are some ideas of activities to do several times a day as instructed by your child’s therapist. Begin with a few seconds at a time and increase until your child can do the suggested activity for about 5 to 15 minutes, 2 to 3 times per day. It is important to vary the type of sensory input so that your child gets used to different types of sensations.

- **Vigorous and light touch massage.** This can be done by you or your child to the area that hurts (it is best to use lotion).
- **Towel rubs.** Use varying textured cloths or towels (such as polar fleece or cotton towels) to gently rub the affected area.
- **Gentle rubbing.** Use a soft brush like a soft facial or nail brush to gently rub the affected area.
- **Rice or sand bins.** Fill an empty storage bin or plastic dish tub with clean sand, uncooked rice, or uncooked beans. Have your child move the affected body part through the bin or dig into the bin with fingers or toes to look for and retrieve small toys or other objects from the bin.
- **Theraputty.** Theraputty is soft putty that you can get from your child’s therapist. Your child can use it to exercise with their hands or feet.
- **Contrast baths.** Use two large bowls or plastic dish tubs, one with cool water and a few ice cubes and one with warm water. Immerse the affected body part in 1 bin for 2 to 3 minutes then switch to the other bin. Repeat this 2 to 3 times. Always finish with the warm water bath.

To Learn More
- Occupational and Physical Therapy 206-987-2113
- Ask your child’s healthcare provider
- seattlechildrens.org

Free Interpreter Services
- In the hospital, ask your nurse.
- From outside the hospital, call the toll-free Family Interpreting Line, 1-866-583-1527. Tell the interpreter the name or extension you need.
• **Foam roll or “peanut” massage.** You can roll and massage with a foam roll or a “peanut” made out of two tennis balls taped together in the shape of a peanut (see image). Use the foam roll to provide pressure to areas on the back or limbs by leaning or rolling on or against it.

**Other suggestions**

Only try these if your child’s therapist or doctor says it is OK.

- Stop or reduce the use of splints, braces, wheelchairs, walkers or crutches so that your child can begin moving and using the affected body part.
- Encourage your child to use their arms, legs and back normally in order to break the pain-function cycle.

**Exercise**

Aerobic exercise (such as brisk walking, jogging, biking, swimming, skating, dancing, stair or hill climbing) has been shown to be best for returning to normal function. Aerobic activities are an important part of treating and managing persistent nerve pain. Your child’s therapist or doctor may recommend that your child start with 15 to 30 minute sessions of movement-based exercise. It is important that your child use the affected body part as much as possible during exercise.

Help your child focus on improved function and being able to take part in normal activities rather than on the pain or what they cannot do.