

# Neuropathic Pain



**N**europathic pain refers to pain that stems from an injury to a single nerve or to several nerves in the body. You actually might feel the pain in one or more parts of the body. Neuropathic pain can occur at any age, but affects older people more frequently than younger people. Damage to the nerves can change a person's sense of touch and can limit arm and leg movement.

Although there are several distinct types of neuropathic pain, the three most common are:

1. postherpetic neuralgia
2. peripheral neuropathy, including diabetic neuropathy
3. complex regional pain syndrome (CRPS)

The treatment for these types of neuropathic pain are similar (see the back side of this sheet).

## Postherpetic neuralgia

Postherpetic neuralgia is a painful condition that can follow the virus known as shingles. Shingles is a painful skin rash and is caused by the same virus that causes chicken pox. Shingles usually develops on the side of the chest and back, but can also occur on the forehead, abdomen, arms, and legs. Postherpetic neuralgia develops if the pain from shingles lasts for more than three months after the rash heals. It may occur at any age, but is especially common for people who:

- are 50 and over
- have other nerve conditions
- have immune systems weakened by HIV or other diseases
- had a more severe shingles rash

If you've had shingles—and if you've experienced a pain that persisted for at least three months after the rash from the shingles healed—you may also have developed postherpetic neuralgia. The pain, itching, and tenderness will most likely be within several inches of the area of the shingles rash.

## Peripheral neuropathy

Peripheral neuropathy results from an injury or disease that damages the peripheral nerves in the body. These are the nerves that branch away from the brain and spinal cord toward your arms, legs, hands, and feet. Peripheral neuropathy can occur in one or more of these parts of the body. The nerve damage may be due to infection, trauma, or disease, such as diabetes.

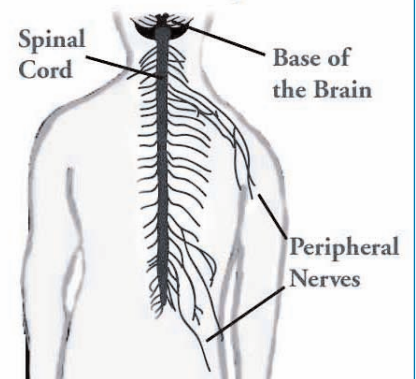
The most common type of peripheral neuropathy affects people with diabetes. This specific condition is referred to as diabetic neuropathy. This can occur when a person has high blood sugar levels for many years. When uncontrolled blood sugar levels stay high for a long time, damage can occur to the insulation around the nerves (the myelin sheath). This damage can happen with Type 1 or Type 2 diabetes, and it can occur at any age. However, taller people tend to have more diabetic neuropathy than shorter people. High blood sugar levels tend to damage the longer nerves in taller people.

Other factors that contribute to diabetic neuropathy include:

- high blood sugar levels for many years
- alcohol overuse
- smoking
- high blood pressure
- high blood cholesterol

These behaviors and conditions can also cause you to lose feeling in your feet, and

## Spinal Cord and Peripheral Nerves





this can lead to foot ulcers. It's a good idea to protect and check your feet every day. If anything is wrong with your feet, call your doctor or other medical professional.

Here are the symptoms for diabetic neuropathy:

- numbness, tingling, and burning in the feet and lower legs—especially at night
- burning, aching, and sharp pain in the feet, arms, or hands
- muscle weakness in the arms, legs, hands, and feet

## Complex Regional Pain Syndrome (CRPS)

CRPS refers to pain that occurs in the hand, foot, or face, but can occur in any area of the body. The exact cause of CRPS is not known. Current thinking is that injury to the nerves or emotional trauma starts the pain and then can cause a cycle of suffering, inactivity, and disability.

Here are the symptoms of CRPS:

- deep aching, burning, shooting pain, or sensitive skin in any area of the body—but particularly on the face, hands, or feet
- swelling or sense of swelling in the affected area
- weakness in the affected body part
- limited movement in the affected area
- temperature or skin color changes to the painful body part
- change in mood
- extremely sensitive skin
- sleep problems

This information is not intended to diagnose health problems or to take the place of medical advice or care you receive from your physician or other medical professional. If you have persistent health problems, or if you have further questions, please consult your doctor. If you have questions or need additional information about your medication, please speak to your pharmacist. Kaiser Permanente does not endorse any brand names; any similar products may be used.

## Treatment for neuropathic pain

Research has shown that treatment specifically tailored for you can help you better manage your pain. You'll want to discuss all of your options with your medical team to determine what sort of treatment program is right for you. Depending on your specific needs, physicians, psychologists, or physical therapists may be involved in your treatment program.

### Treatment of neuropathic pain includes:

- increasing physical activity
- using cognitive-behavioral strategies and stress management techniques to help with mood and functioning
- using medications to help with pain and mood
- managing stress
- improving your blood pressure
- quitting smoking
- lowering your blood sugar levels (if you have diabetic neuropathy)

## Physical activity

The main goal of treating neuropathic pain is to help improve your comfort in daily life. You may not be eager to be active if you are in pain and feel tired. You may talk with a physical therapist to plan an exercise program to help make you more flexible, fit, and make movement more comfortable. The activity should not bring on the pain or make the pain any worse. If you have new or changing patterns of pain or discomfort, you should stop the activity. Physical activity—such as swimming, water

aerobics, walking, and biking—are the best way to start. Start off slowly, but try to increase your activity over time. Try to aim for getting 30 to 60 minutes of exercise most days of the week.

## Cognitive-behavioral strategies

Cognitive-behavioral strategies and stress-management techniques have been shown to help people better manage and cope with neuropathic pain. The cognitive-behavioral approach highlights how thoughts, ideas, and beliefs affect your behavior and emotions. In cognitive-behavioral therapy, you learn ways to change your thinking styles to decrease suffering. When you increase your ability to cope with the neuropathic pain, you are more likely to feel better. Contact your doctor or other medical professional for more information.

## Medications

Medications are given to decrease pain and discomfort. You may discuss with your medical team which medications you need. Nonsteroidal Anti-Inflammatory Drugs (NSAIDs) decrease mild to moderate pain and inflammation for a short period of time. Medications such as tricyclic antidepressants (TCAs) like amitriptyline, nortriptyline, and desipramine help decrease pain and also help with sleep and mood. Capsaicin and Lidocaine cream may be prescribed to soothe skin sensitivity and relieve pain. Take medications only after consulting with your doctor or nurse practitioner.

## Call Kaiser Permanente if you . . .

- begin to increase your use of pain medication
- feel that your activity level is beginning to decline
- are feeling anxious more often
- are feeling depressed more often