

Nerve Tumors

What is a nerve tumor?

Nerve tumors are growths that form within a peripheral nerve. They are not uncommon and typically are benign (non-cancerous) but can cause symptoms of nerve irritation, compression, and pain which may require treatment. Nerve tumors can develop on any nerve in any location so the signs and symptoms that develop vary depending on how that nerve is affected and what function that nerve has. They are more common in patients with a history of a condition known as neurofibromatosis or a history of radiation therapy.

What types of nerve tumors are there?

- Benign (non-cancerous) nerve tumors:
 - Schwannomas are the most common type of nerve tumor. They can occur anywhere on the body on any peripheral nerve. They may only be noticed as a growing mass under the skin but as they get larger they may produce symptoms of nerve compression such as numbness, tingling, or pain.
 - Neurofibromas are another type of common nerve tumors that grow within the nerve and can be found any area of the body. The symptoms are similar to those found with Schwannomas. Multiple neurofibromas are associated with a condition called neurofibromatosis.
 - Neuromas are an abnormal mass of nerve tissue at the site of a prior nerve injury. A neuroma is basically scar tissue within the nerve and will have similar symptoms as other nerve tumors
- Malignant (cancerous) nerve tumors:
 - Malignant peripheral nerve sheath tumor is a rare type of cancerous nerve tumor that can develop anywhere in the body on any peripheral nerve. Like the benign nerve tumors, it may only present as a lump without any symptoms or may be associated with numbness, tingling, or pain if the nerve is compressed.

How are nerve tumors diagnosed?

- History and physical examination can provide strong clues about the cause and severity of the nerve injury by the symptoms and signs of nerve irritation in the absence of injury.
- Electromyography and nerve conduction study can provide information about how the tumor may be impacting nerve function.
- Magnetic resonance imaging (MRI) and computerized tomography (CT) scan can visualize the tumor and describe its location.
- Biopsy if the tumor is in an area that can be easily accessed can provide definitive information about the type of tumor

How are nerve tumors treated?

Asymptomatic nerve tumors may not require any treatment if they are not producing bothersome symptoms. If the nerve tumor grows to the point that it produces symptoms such as pain, numbness, or functional loss, or if there is concern about malignancy (cancerous tumor), surgical excision is often necessary.