

Ulnar Nerve Mononeuropathy at the Elbow

Condition: Ulnar neuropathy at the elbow (UNE) occurs when the ulnar nerve gets compressed as it crosses the elbow resulting in pain, numbness, and occasionally weakness on the affected side. This condition can be accurately and reliably diagnosed and treated by a physical medicine and rehabilitation (PM&R) physician.

Background: Ulnar nerve dysfunction may occur due to trauma or injury, repetitive leaning on hard surfaces, repetitive elbow flexion or prolonged elbow flexion, or abnormal anatomy at the elbow. This condition is thought to affect roughly 25 per 100,000 people every year.

Risk Factors: Ulnar neuropathy at the elbow occurs most frequently due to repetitive/prolonged elbow flexion and/or resting the elbow on hard surfaces for prolonged periods of times. This is most frequently seen in manual laborers and wheelchair users. It is also seen in smokers and patients with systemic diseases such as diabetes or rheumatoid arthritis. Bilateral involvement is common in patients who have been diagnosed with UNE on one side.

History and Symptoms: Patients typically report sensation changes in the pinky finger and ring finger. If there is motor involvement, a patient may have weakness and loss of coordination in the affected hand.

Physical Exam: During the exam, your health care provider will inspect the involved limb, check range of motion, strength, sensation, and reflexes, and attempt to reproduce your pain with various positions and maneuvers. It is not uncommon for PM&R physicians to evaluate the neck, shoulder, and hand in addition to the elbow to rule out common UNE mimics.

Diagnostic Process: After a careful history and physical examination, your PM&R physician may opt to obtain additional labs or imaging, but this is often not needed. If your physician suspects diabetes or rheumatoid arthritis, he or she may order lab tests. Your physician may use ultrasound to examine your elbow for nerve compression or may order an X-ray or MRI to exclude other causes of elbow pain. If the diagnosis remains uncertain, your doctor may order electromyography (EMG) to assess the electrical activity in your muscles and nerves for diagnosis confirmation.

Rehab Management: Treatment for mild ulnar neuropathy includes education, activity modification, elbow padding, and night splinting to prevent elbow flexion. Your PM&R physician may refer you to Occupational Therapy to ensure optimal positioning during work and to restore any loss of function. Moderate to severe neuropathy that has failed more conservative treatment may require surgery.

Other Resources for Patients and Families: Patient and family education is critical for lifestyle modifications and successful rehabilitation.

Frequently Asked Questions

What is PM&R?

Physical medicine and rehabilitation (PM&R), also known as physiatry, is a primary medical specialty that aims to enhance and restore functional ability and improve quality of life to those with injuries, physical impairments or disabilities affecting the brain, spinal cord, nerves, bones, joints, ligaments, muscles and tendons. PM&R physicians, known as physiatrists, evaluate and treat the whole body, maximize patients' independence in their daily life and are experts in designing comprehensive, patient-centered treatment plans to empower patients to achieve their goals. By taking the whole body into account, they can accurately pin-point problems, decrease pain, assist in recovery from devastating injuries and maximize overall outcomes and performance with non-surgical and peri-surgical options. To learn more, visit www.aapmr.org/aboutpmr.

What makes PM&R physicians unique?

PM&R physicians' training focuses not just on treating medical conditions, but on enhancing the patient's performance and quality of life in the context of those medical conditions. They focus not only on one part of the body, but instead on the development of a comprehensive program for putting the pieces of a person's life back together – medically, socially, emotionally and vocationally – after injury or disease. PM&R physicians make and manage medical diagnoses, design a treatment plan and prescribe the therapies that physical therapists or other allied therapists perform or that are carried out by the patients themselves. By providing an appropriate treatment plan, PM&R physicians help patients stay as active as possible at any age. Their broad medical expertise allows them to treat disabling conditions throughout a person's lifetime.

Why see a PM&R physician?

A PM&R physician will thoroughly assess your condition, needs, and expectations and rule out any serious medical illnesses to develop a treatment plan. By understanding your condition and goals, you and your PM&R physician can develop a treatment plan suited to your unique needs.

How do I find a PM&R physician near me?

Visit www.aapmr.org/findapmrphysician or contact your primary care physician for a referral.