

Nacional  Re

Selección Vida



Neurological diseases

NEW RATERS IN THE DAVINCI MANUAL

NEUROLOGICAL DISEASES

Peripheral nerves are found outside of the brain and spinal cord. Injuries to these structures can be mild or severe. In the mildest cases, the chances of healing are high, on the contrary, in the most serious, the nerve can be completely sectioned, causing loss of sensitivity or motor function in the damaged area, thus making recovery difficult.

There are more than a hundred different types of disorders that affect the peripheral nerves. In this review, we will address some of the most prevalent diseases of the peripheral nerves.

AMYOTROPHIC LATERAL SCLEROSIS (ALS)

Amyotrophic lateral sclerosis is a rare neurological disease that mainly affects the neurons responsible for controlling the movement of voluntary muscles, which are responsible for producing movements such as chewing, walking and talking.

It is a progressive disease, which means that symptoms worsen over time. Currently, there is neither a cure nor an effective treatment to stop or reverse the progression of the disease.

Motor neuron diseases

ALS belongs to a larger group of disorders known as motor neuron diseases, which are caused by the degeneration and death of motor neurons.

Motor neurons are nerve cells that extend from the brain to the spinal cord and muscles throughout the body. As motor neurons degenerate, they stop sending messages to the muscles, and the muscles gradually weaken, begin to contract, and atrophy. Eventually, the brain loses its ability to initiate and control voluntary movements.

Symptomatology

The onset of ALS can be so subtle that symptoms are overlooked, but gradually these symptoms develop into more obvious weakness or wasting.

Early symptoms include:

- Muscle spasms in the arm, leg, shoulder, or tongue
- Muscle cramps
- Tight and stiff muscles (spasticity)
- Muscle weakness affecting an arm, leg, neck or diaphragm
- Nasal speech
- Difficulty chewing or swallowing

The first sign of ALS usually appears in the hand or arm and can manifest as difficulty performing simple tasks such as buttoning a shirt, writing, or turning a key in a lock.

In other cases, the symptoms initially affect one leg. People experience discomfort when walking or running, or may stumble more frequently.

As the disease progresses, muscle weakness and atrophy spread to other parts of the body. People can develop problems moving, swallowing, speaking, forming words, and breathing.

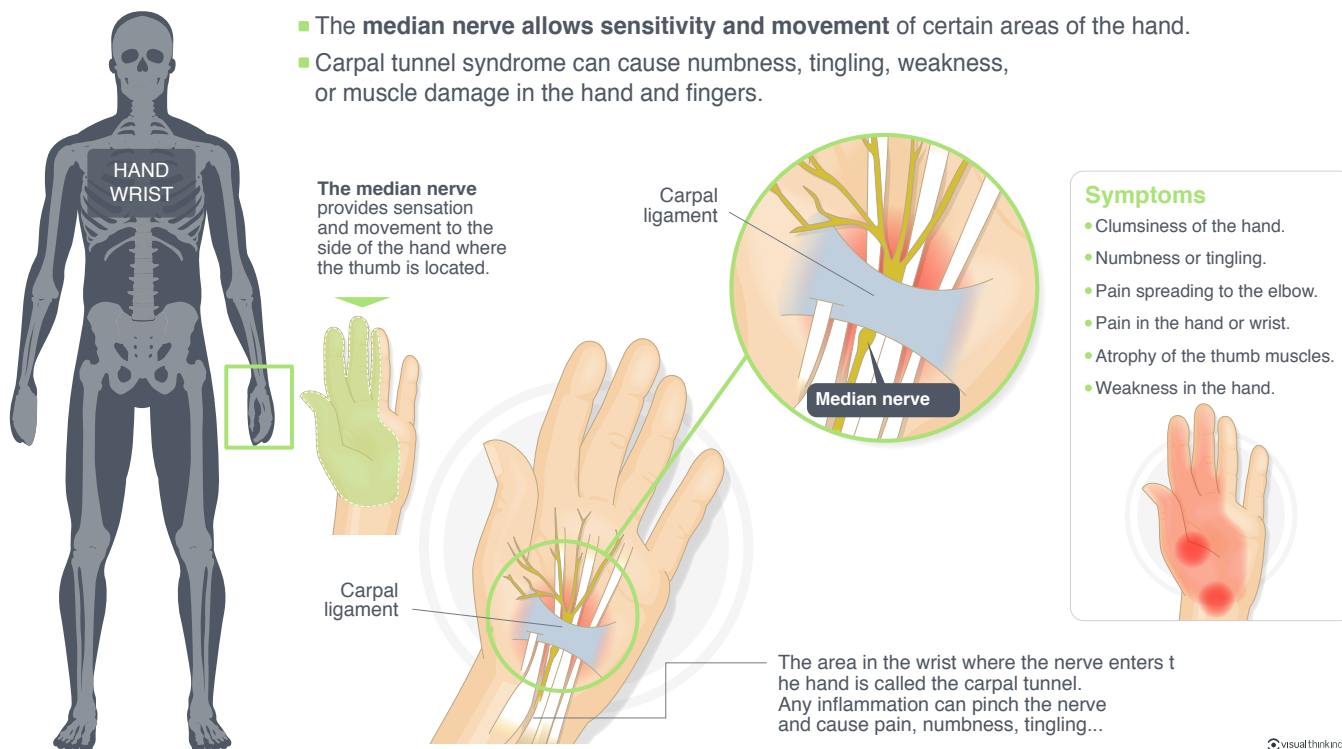
Because people with ALS can generally perform higher mental processes such as reasoning, remembering, understanding, and problem solving, they are aware of their progressive loss of function and may become depressed.

In advanced stages, people with ALS lose the ability to breathe on their own and may be dependent on a ventilator, and face an increased risk of pneumonia.

CARPAL TUNNEL SYNDROME

It is a condition in which there is **excessive pressure on the median nerve of the wrist**.

- The **median nerve allows sensitivity and movement** of certain areas of the hand.
- Carpal tunnel syndrome can cause numbness, tingling, weakness, or muscle damage in the hand and fingers.



visual thinking

CARPAL TUNNEL SYNDROME

Carpal tunnel syndrome (CTS) occurs when the median nerve, which runs from the forearm to the palm of the hand, is pressed or compressed in the wrist area. The carpal tunnel is a narrow, rigid passageway of ligaments and bones at the base of the hand, which houses the median nerve and the tendons that bend the fingers.

The median nerve provides sensation to the palm side of the thumb and to the index, middle, and part of the ring fingers, as well as controlling some small muscles at the base of the thumb.

Symptoms

Symptoms usually start gradually, with frequent numbness or tingling in the fingers, especially the thumb and index and middle fingers. The symptoms often appear for the first time - in one or both hands - during the night. The dominant hand is usually affected first and produces the most severe symptoms.

As symptoms worsen, people may feel tingling throughout the day, especially when doing certain activities, such as picking up the phone, reading a book, or driving. Hand weakness can make it difficult to grasp small objects or perform other manual tasks. In chronic and/or untreated cases, the muscles at the base of the thumb can wear out.

Etiology

Carpal tunnel syndrome is often the result of a combination of factors that increase pressure on the median nerve and the tendons in the carpal tunnel, rather than a problem with the nerve itself.

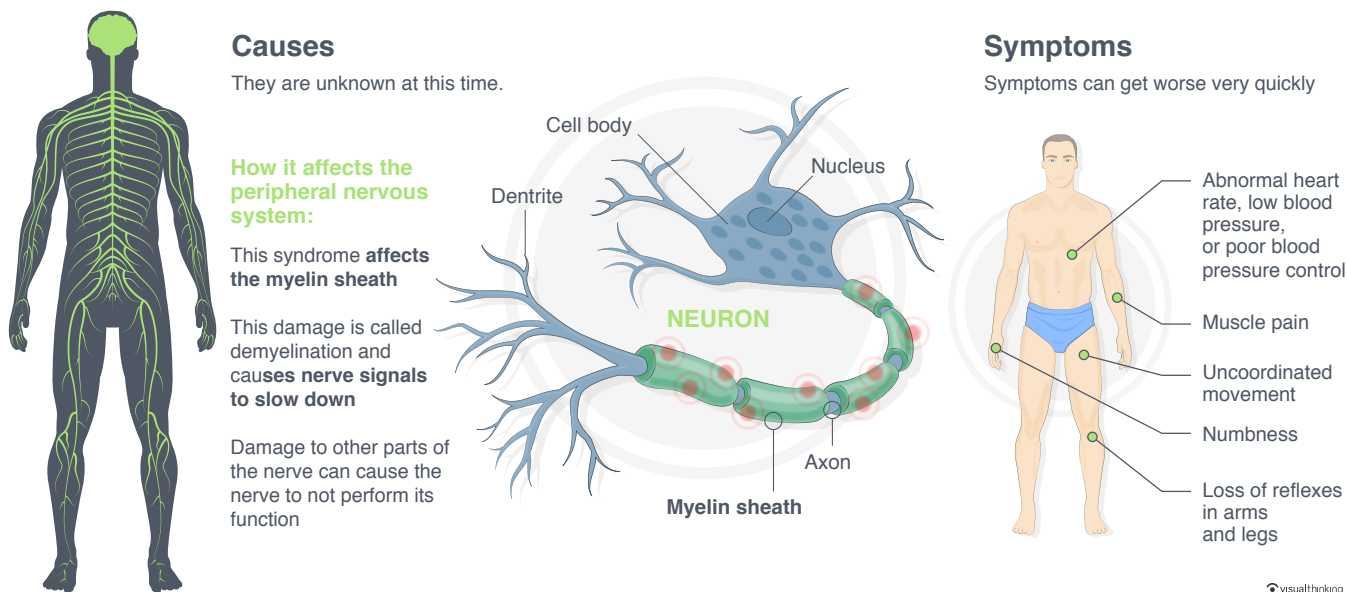
Overall, three times more women suffer from CTS than men. In large part, it's due to anatomical differences. People with diabetes or other metabolic disorders are also more susceptible.

Treatment

Carpal tunnel release is one of the most common surgical procedures and involves cutting a ligament around the wrist to reduce pressure on the median nerve. The surgery is usually performed under local or regional anesthesia.

GUILLAIN BARRE SYNDROME

It is an **autoimmune disorder** in which **an area of the peripheral nervous system is mistakenly attacked**



GUILLAIN BARRE SYNDROME

Guillain-Barre syndrome (GBS) is a rare neurological disorder in which the body's immune system mistakenly attacks part of its peripheral nervous system. This disease can range from a very mild case with brief weakness to almost devastating paralysis, which leaves the person unable to breathe independently.

Most people eventually recover from even the most severe cases. After recovery, some people will still have some degree of weakness.

Etiology

Guillain-Barre syndrome can affect anyone. It can appear at any age, although it is more frequent in adults and the elderly. It's estimated that this disease affects approximately one person in 100,000 each year.

The exact cause of GBS is unknown, although it's known to be neither contagious nor hereditary. Apparently, the immune system mistakenly begins to attack the body itself. It is believed that, at least in some cases, this immune attack is initiated to fight an infection, and that some chemicals in the infecting bacteria or virus mimic those in nerve cells, which, in turn, also become targets. Of attack.

Symptomatology

Most cases usually begin a few days to weeks after a respiratory or gastrointestinal viral infection.

The first sensations experienced by patients are usually described as tingling in the feet or hands, or even pain, often starting in the legs or back.

As the days go by, weakness appears on both sides of the body, which is usually the symptom that leads most people to seek medical attention. The weakness may first appear as difficulty climbing stairs or walking.

Symptoms often spread to the arms, respiratory muscles, and even the face, reflecting more widespread nerve damage.

In addition to muscle weakness may appear:

- Difficulty with eye muscles and vision
- Difficulty swallowing, speaking or chewing
- Stinging sensations in the hands and feet
- Pain that can be severe, especially at night
- Coordination problems and instability
- Abnormal heart rate
- Problems with digestion and/or bladder control



SCIATICA

Pain with a tingling or stinging sensation can appear anywhere in the sciatic nerve path, generally caused by some compression (pyramidal or piriformis contracture) or other factors; It is called sciatica or sciatica.

Etiology

The most common causes of sciatica are the presence of a herniated disc, stenosis of the spinal canal, or pyramidal syndrome.

Symptoms

The most frequent symptoms are:

- Constant pain at the level of a buttock or that radiates throughout the lower limb in its posterior part
- Pain that visibly worsens when sitting down
- Stabbing pain that makes it difficult to stand or walk

- Pain that may be aggravated by flexing the foot or knee
- Existence of burning or tingling that goes down the leg
- Existence of weakness, numbness or difficulty moving the leg or foot

CHARCOT-MARIE-TOOTH DISEASE

This disease belongs to the group of sensory-motor hereditary neuropathies, despite belonging to the group of rare diseases, it is the most frequent of hereditary neuropathies.

The symptoms usually begin in childhood, with the appearance of foot drop and slowly progressive distal muscular atrophy, giving rise to what is known as stork legs. Subsequently, there is atrophy of the intrinsic muscles of the hands and a deficit in vibratory sensation with a glove-and-sock distribution pattern.



TRIGEMINAL NEURALGIA

Trigeminal neuralgia is a condition that causes painful sensations similar to an electric shock on one side of the face. This chronic pain condition affects the trigeminal nerve, which carries sensation from the face to the brain.

Women suffer from it more often than men and it's more likely to occur in people over 50 years of age.

Etiology

In trigeminal neuralgia the function of the nerve is altered. The problem is usually the contact between a normal blood vessel and the trigeminal nerve located at the base of the brain.

Although compression by a blood vessel is one of the most common causes of trigeminal neural-

gia, there are many other possible causes, some of which may be related to multiple sclerosis or a similar disorder that damages the myelin sheath that protects certain nerves.

Symptoms

Symptoms of trigeminal neuralgia may include:

- Episodes of intense or stabbing pain that can feel like an electric shock
- Spontaneous attacks of pain or attacks triggered by acts such as touching your face, chewing, talking, or brushing your teeth
- Attacks of pain that last from a few seconds to several minutes
- Pain that occurs with facial spasms
- Episodes of several attacks lasting days, weeks, months, or longer
- Pain in areas supplied by the trigeminal nerve, such as the cheek, jaw, teeth, gums, lips, or less frequently, the eyes and forehead

NEW RATERS IN OUR DAVINCI TOOL

We are pleased to inform you of the changes made in recent months to our Davinci risk selection tool (davinci.nacionalre.es), incorporating the already existing automatic raters and the incorporation of Life NR to the website.



LIVE NR
TARIFIER



DIABETES
TARIFIER



CÁNCER
TARIFIER



OCCUPATIONAL
HAZARDS
TARIFIER



SPORTS AND
HOBBIES
TARIFIER

LIFE NR

- Quick rater of the most common alterations/habits, normally included in the health declaration.
- We remember the virtue of Vida NR, as they are multiplicative pathologies among themselves, the program will automatically add a surcharge for the accumulation of these.

AUTOMATIC CANCER RATER

With this rater we have tried to create a simple tool that quickly and intuitively assesses neoplasia from a medical insurance point of view.

With this automatic rater, more than 800 types of tumors can be assessed.

At first it was thought to do it through the TNM, however, there were a series of premises that advised against its use:

1. TNM can vary over time
2. Not all reports have TNM available
3. Sometimes the N or the M appear in complex radiological reports, for untrained or non-health professionals this is a tedious job that is not exempt from mistakes
4. There are tumors that are not classified according to TNM

In short, we opted for something simpler, and one that produces more satisfaction in the candidate, since in principle all tumors can be susceptible to being contracted, what is required is to be free of disease for a period to be able to begin to assess the guarantees.

For this reason, instead of TNM, which expresses prognosis, we opted for “free of tumor disease”.



PROFESSIONAL RISK RATER

- Search for professions using a dropdown, in the classification field or in the “search in table” link, here the entire database is displayed. In this section you can also perform a search.
- Each profession will be assigned a rate based on its risk.
- There are three sections:
 - Classification (profession)
 - At-risk group (modality within that profession)
 - Exercise (features)
 - If the profession requires it, a specific questionnaire for that profession will be displayed.

SPORTS AND HOBBIES RATER

- Same dynamic as the professional risks rater

APRAISER OF DIABETES

- In recent years, more than 800 cases of diabetes have been rated at NR, which is more than enough reason to develop an automatic diabetes rater.
- For a correct assessment of a candidate with diabetes, multiple associated factors must be taken into account and must not be overlooked. Some of these factors do not allow you to insure the risk, therefore, it is the first section that must be completed when using this rater.

DECISION TREE

- Nacional Re goes one step further when it comes to making subscriptions easier for its cedants.
- To this end, the Personal Branches department has been working for some time to make the Decision Tree available to its cedants (map of the possible results of a series of related decisions).
- In this tree, more than 1,000 pathologies are contemplated, which with closed questions (yes/no), we reach the final assessment of the selected pathology, making the selection of risks more agile and effective.

**Selección
Vida**

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