

Case study about cervical plexus

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This 66-year-old female was involved in an auto accident 15 years prior in which she was side-swiped at approximately 40 mph.

Two years after the accident, she started to notice slight involuntary movements in her neck. Her symptoms gradually worsened and she was diagnosed with cervical dystonia / spasmodic torticollis. She described that her neck would involuntarily pull in different directions. Most frequently, her head pulled to the right and would cause her to have difficulty walking in a straight line.

Besides pulling, she also reported neck tremors for the past 5 years.

She tried multiple medications along with Botulinum injections but her symptoms persisted. Because she lived in Europe and was unable to find any effective treatment, she traveled to the United States to undergo an evaluation and treatment with Dr. Ulster. During her initial upper cervical chiropractic evaluation, an upper neck injury was discovered, which most likely stemmed from the auto accident 15 years prior. She stayed in the United States and underwent treatment for approximately 3 months and gradually reported improvement in her neck over the treatment period.

The neck spasms, pulling, and tremors gradually subsided. Because her neck had stabilized, she was able to return to Europe. **Introduction** Cervical dystonia, also called spasmodic torticollis, is a painful condition in which the neck muscles contract involuntarily, causing your head to twist or turn to one side. Cervical dystonia can also cause your head to uncontrollably tilt forward or backward.

A rare disorder that can occur at any age, even infancy, cervical dystonia most often occurs in middle-aged people, women more than men. Symptoms generally begin gradually and then reach a point where they don't get substantially worse.

There is no cure for cervical dystonia. The disorder sometimes resolves without treatment, but sustained remissions are uncommon. Injecting botulinum toxin into the affected muscles often reduces the signs and symptoms of cervical dystonia.

Surgery may be appropriate in a few cases. II. Anatomy ; Physiology
The cervical plexus is a plexus of the ventral rami of the first four cervical spinal nerves which are located from C1 to C4 cervical segment in the neck. They are located laterally to the transverse processes between vertebral muscles from the deep side and vertebral (m. Sternocleidomastoid, m. Elevator scapulae, m.

Supplies services) from lateral side. There is communication with accessory nerve, vagus nerve and sympathetic trunk. It is located in the neck, deep to extracranial structures. Nerves formed from the cervical plexus innervate the back of the head, as well as some neck muscles. The branches of the cervical plexus emerge from the posterior triangle at the nerve point, point which lies midway on the posterior border of the Sternocleidomastoid. The cervical plexus has two types of branches: cutaneous and muscular.

Cutaneous (4 branches): Lesser occipital nerve - innervates lateral part of occipital region (C2 ONLY) Great auricular nerve - innervates skin near concha auricle and external acoustic meatus (C2&C3) * Transverse cervical nerve - innervates anterior region of neck (C2&C3) * Superficial nerves -
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innervate region of spirituality, shoulder, and upper thoracic region (CO, CO)
 * Muscular * NSA cervical (loop formed from CLC-CO), etc. (genocide (CLC only), thyroid (CLC only), strengtheners, stereotyped, moodily) * Pyrrhic (CO-CO (primarily CO))- innervates diaphragm and the pericardium * Segmental branches (CLC-CO)-

Innervates anterior and middle scalene III. Types of Cervical Distant There are several types of cervical distant depending on which nerves and muscles are involved: I Tortillas is the most common form where both head and neck twist and turn sideways and may result in the chin pointing to one shoulder I I Altercations is Inhere the neck turns, flexes or extends to the side and the head may be turned and pulled to one side and down to the shoulder I I Interactions results in the head being pulled forwards and the chin drawn down towards the chest I I Retrorocket is where the head tilts backwards towards the spine I IV.

Pathologically ere additions can be divided into three groups: idiopathic, genetic, and acquired. * Idiopathic distant refers to distant that does not have a clear cause.

Many instances of distant are idiopathic. * There are several genetic causes of distant. Some forms appear to be inherited in a dominant manner, which means only one parent who carries the defective gene is needed to pass the disorder to their child. Each child off parent having the abnormal gene will have a 50 percent chance of carrying the defective gene. It is important to note the symptoms may vary Needle in type and severity even among members of the same family.

In some instances, persons who inherit the defective gene may not develop distant. Having one mutated gene appears to be sufficient to cause the chemical imbalances that may lead to distant, but other genetic or even environmental factors may play a role. Knowing the pattern of inheritance can help families understand the risk of passing distant along to future generations. * Accreditation, also called secondary distant, results from environmental or there damage to the brain, or from exposure to certain types of medications.

Some causes of acquired distant include birth injury (including hypoxia, a lack of oxygen to the brain, and neonatal brain hemorrhage), certain infections, reactions to certain drugs, heavy metal or carbon monoxide poisoning, trauma, or stroke.

Distant can be symptom of other diseases, some of which may be hereditary. Acquired distant often plateaus and does not spread to other parts of the body. Distant that occurs as a result of medications often ceases if the medications are stopped quickly. V. Signs and Symptoms Distant is the name for a particular disorder of the nerves that causes muscles to contract and spasm on their own.

Cervical distant is a condition that causes neck muscles to tighten or spasm without your control. L Other terms doctors use to describe cervical distant include spasmodic tortillas and tortillas. If you have cervical distant, your neck may Jerk or turn in unusual ways. This often produces an abnormal head position. Common signs and symptoms of cervical distant may include any combination of the following: * Muscle spasms or tightness * Neck pain

(reported in up to 91% of cases) Uncomfortable pulling or drawing in the neck or shifting of the head to one side Symptoms that worsen during the first 5 years * Head tremors VI.

Diagnosis * General physical and neurological examinations * Evaluation of the nature of the distant, including: * Apparent age at symptom onset * Bodily distribution * Disease progression Whether distant occurs with specific actions * If it is characterized by “ overflow” * If it is present at rest * Whether certain “ sensory tricks” temporarily suppress tectonic movements
 The examiner may also attempt to conduct passive movements of the affected body part, carefully feel (palpate) contracting muscles, and/or request that a patient adopt various positions or postures with the affected area.

Such methods may be necessary for accurate diagnosis, appropriate assessment of the nature of distant, and localization of involved muscles (e.g., for those who may be appropriate candidates for therapy with botulinum toxin). Such evaluation may be documented by videotaped recordings. For those patients with suspected laryngeal distant, voice assessment is typically documented on voice recordings. Additional evaluations may include assessment by a speech-language pathologist,

and, when appropriate, physical or occupational therapists, or genetic counselors.

* A thorough patient history to help determine or exclude causative factors potentially associated with cervical distant and other forms of distant, such as exposure to certain toxins; peripheral, head, or spinal trauma; certain infections or inflammatory conditions of the brain; etc. * A detailed family

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history * Electrical recording techniques, such as electromyography (MEG); nerve conduction velocity tests; or other methods (e. G. , reflex studies). * Biopsies.

In selected patients, diagnostic assessment may include surgical removal and microscopic evaluation (biopsy) of small samples of skin, muscle, and/or nerve tissue. Thorough neurological evaluations to help confirm or exclude the presence of other neurological signs that may suggest secondary additions, distant-plus syndromes, or hardheartedness disorders. Such neurological signs may include certain eye ocular) abnormalities (e. G. , optic atrophy, retinal abnormalities); Parkinson; anonymous; impaired coordination of voluntary movements (ataxia); spastic; muscle Meanness; dementia; seizures; and/or other findings.

For certain patients with adult-onset focal distant such as cervical distant, which is resumed to be primary (e.

G. , based upon thorough clinical examination, a complete patient and family history, nature of the distant, absence of certain signs upon examination, etc.), experts indicate that extensive laboratory or nonrecurring studies may not be necessary. VI'. Treatment People who have cervical distant often must use a combination of medications to reduce their signs and symptoms.

Botulism toxin. This paralyzing agent, oaten used to smooth tactical wrinkles, can be injected directly into the neck muscles affected by cervical distant. Most people with arrival distant see an immediate improvement with this treatment, which usually must be repeated every three to four months. * Parkinson drugs. Medications used to combat the tremors associated with <https://assignbuster.com/case-study-about-cervical-plexus/>

Parkinson disease, including threateningly and penetration (Connecting), may be used in combination with botulism toxin injections.

Frequent side effects include dry mouth, constipation, memory problems, reduced urinary stream or visual blurring.

* Muscle relaxants. These drugs often help a little, but also have side effects, most notably sedation, imbalance and mild cognitive impairment. Examples include disappear Valid, Distal), Lorena (Divan), colonnaded (Sloping) and bachelor (L'Oreal). Pain medications. The pain from cervical distant may require drug treatment. This may range from over-the-counter pain relievers to prescription pain medications.

Cervical distant has no cure, but you can do a number of things to minimize its effects: * Reduce stress. Avoiding situations that cause stress or anxiety is important because stress tends to make your signs and symptoms worse. * Get your rest. Signs often disappear during sleep, so get plenty of rest. You may find relief by aging short breaks during your day to lie on your back and relax. * Use heat.

Heat packs may help loosen the taut muscles in your neck and help with pain relief. * ray touching.

Sensory tricks, such as touching the opposite side of your face or the back of your head, may cause spasms to stop temporarily. Different sensory tricks Nor for different people, and if you find one that works, it usually will continue to Nor for you. Some types of alternative medicine techniques may help the medications prescribed to treat cervical distant work better or for

longer periods of time. For example, sausage or other strategies that tend to relieve muscle tension may be tried.

VIII. Cranial Nerve Involved (X') Anatomy.

Although CNN XI is included in the Cons, the cell bodies of this nerve actually reside in the spinal cord. They probably are continuous with the nucleus ambiguus of the medulla, however. CNN XSL emerges from the Jugular foramen with CONS IX and X, but it does so by first ascending into the skull via the foramen magnum, and then exiting the central nervous system via the Jugular foramen.

This unusual anatomical configuration makes CNN XSL at risk for injury in fractures of the cervical vertebrae or there spinal cord injuries.

CNN XI innervates the extraterritoriality muscle and the trapezium muscle. Cervical distant (torticollis). A cervical lesion to the nerve roots of CNN XSL can result in cervical distant or torticollis. Patients who are receiving antispasmodic medications and develop cervical distant should be evaluated tort lower motor neuron nerve root compression of CNN XSL at the cervical level in a differential diagnosis, which also involves the more obvious and common cause of cervical distant? central involvement of the motor pathways at the level of the basal ganglia resulting in tardier distant.