

# Eliminate Neck Spasm for Good, the Relationship between Neck Spasms Resulting from Daily Activities and the Exercises to Improve Neck Pain

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## Abstract

Our spine is like a bridge between our head and legs and they bear two thirds of our body weight. Our spine consists of 33 bones, called vertebrae, including 23 moving vertebrae. Connective tissues, joints and discs connect these bones to each other. We also have strong muscles around the spine that enable movements and attach to each vertebra. A spasm is an involuntary tightening of muscle in your body. It often causes intense pain. This pain can last for minutes, hours, or days after the muscle relaxes and the spasm subsides. Spasms can happen in any part of your body where there's muscle, including your neck. The ways for improving neck spasms are self-care treatments, alternative treatments and procedures, and Surgery.

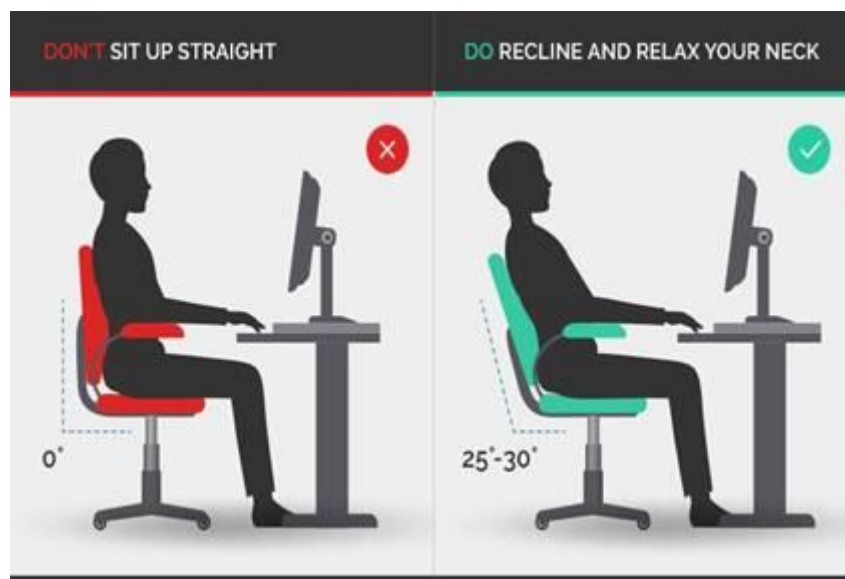


Figure 1

**Keywords :** Neck; Pain; Spine; Spasm; treatment; Procedure; Surgery; Self-care; Simple and Scalene Stretches.

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## 1. Introduction

Our spine plays a critical role in supporting our head and allowing the flexibility of our neck. When there is an increased strain on the back or minimal rest of the neck, the spinal cord is forced to withstand the pressure which may result in neck spasms. “A neck spasm occurs when your neck muscles suddenly, involuntarily tighten. Your neck becomes painful and stiff, likely affecting the ability to turn your head. An awkward neck movement or stress-related muscle tension is often what triggers a neck spasm.” [4]. A common contributor to neck spasms is the limited movement of workers in more computer-based working environments. According to studies conducted by The Canadian Chiropractic Association [3], work-related neck pain (WRNP) has been gradually increasing annually based on the increase in computer-related jobs and activities. The continuous sitting at your workstation throughout the day, or playing video games, causes a strain on the neck due to the contraction of the neck muscle. Riew [5] stated “When you’re working on a computer or looking down at your phone, the muscles in the back of the neck have to contract to hold your head up. The more you look down, the more the muscles must work to keep your head up. These muscles can get overly tired and sore from looking down at our smartphones, working on computers, or looking down at our tablets all day.”

## 2. Materials and Methods

The body needs to be properly positioned and both neck and back should have adequate support. Even with support intermittent breaks are needed to help with blood flow. Work-related neck pain can lead to more significant health issues if left untreated. However, it is always best to be cautious and take the necessary steps to prevent neck pain from occurring. In doing so, you ensure you are seated properly and not in a slouching position. A reclining chair is also ideal along with intermittent movements. There are symptoms such as Headaches, stiff necks, neck spasms, and pain between your shoulder blades which are common for persons diagnosed with neck spasms. After it has been confirmed that you are suffering from a neck spasm, there are various treatment options to consider. Most of these treatments are done through exercises. There are varying options for treatment; however, the three broad categories for treating neck spasms are self-care treatments, alternative treatments and procedures, and Surgery. There are times people turn to home remedies to treat ailments. Neck pain can be treated with self-care in the event the condition is mild. Vorvick [9] stated in her article “*Neck Pain or Spasms Self-Care*” that in relieving neck pain, you may reduce your activities, stay away from excessive bed rest, and ensure you stay active without making the pain worse. In many cases, stretching your neck gently can ease soreness, stiffness, and spasms. While at work doing a gentle stretch every hour and a half can be very helpful. You may do simple or scalene stretches. Below are steps on how to do simple and scalene stretches:

**Table 1**

Simple Stretches	Scalene Stretches
<ol style="list-style-type: none"> <li>1. Sit or stand with your head looking forward.</li> <li>2. Gently turn your head to the right.</li> <li>3. Lightly place your right hand on the back of your head and allow the weight of your hand to push your chin down toward the right side of your chest.</li> <li>4. Relax your muscles and hold your head in this position for 15 seconds.</li> <li>5. Repeat this stretch three times on each side.</li> </ol>	<ol style="list-style-type: none"> <li>1. Sit or stand with your arms hanging down at your side.</li> <li>2. Reach your hands behind your back and grasp your left wrist with your right hand.</li> <li>3. Gently pull your left arm down and tilt your head to the right side until you feel a slight stretch in your neck.</li> <li>4. Hold this stretch for 15 to 30 seconds.</li> <li>5. Repeat this stretch three times on each side.</li> </ol>

Outside of stretches, there are other home remedies that may be considered when looking for ways to alleviate neck spasms. Ice packs and heat therapy wherein you add a heating pad, warm shower, placing a warm cloth or bottle on your neck may help in recovery. While resting is important in the recovery process, keeping active is also very important. Remaining physical but keeping away from strenuous activities may help you in relieving your pain. There are instances when home remedies may not be enough to eliminate the pain. This is where physical therapy will be needed. There are varying physical therapies that have been used in the treatment of neck spasms. The main goal of physical therapy is to improve the strength and flexibility of the neck. Reference [1] in his article “*Active Physical Therapy for Neck Pain*” stated some common types of active physical therapy are stretches and exercises, aerobic exercises, aquatic exercises, massage, and core and back strengthening. While there are physical activities you may do on your own, there are others that a therapist is needed to ensure it is done correctly and not to cause further harm to your neck. Reference [1] further lamented that stretches such as chin tuck, another common form of stretch may be used in the recovery process. Whenever physical therapy is recommended in the improvement of neck functioning and strengthening, it is a possibility that the core and back muscles may also benefit from strengthening. To relieve the stiffness of the neck and to increase blood flow, aerobic exercise may be recommended by the physical therapist. Reference [2] stated that a critical part of any exercise program is aerobic exercise. There are various types of aerobic exercises such as exercise walking, swimming and water aerobics, stationary bicycling, elliptical trainer, or step machine. Choosing which method of aerobic exercise, boils down to preferences and trial and error until you find the one that works for you. A soothing massage not only offers comfort but also increases recovery from a neck spasm. Your therapist will help in deciding which exercise based on your symptoms which works best for you. There are other instances when non-surgical methods of treatment may be insufficient, and surgery is required. Reference [7] explained the three probable reasons for getting surgery to alleviate neck pain; to decompress a nerve root, to decompress the spinal cord and stabilize the cervical spine. A key point to note if imaging and diagnostics are unable to detect and align one of the three reasons to the pain, then surgery will not be recommended as it unlikely to help [8]. There are other important pointers to know about neck spasms. With home remedies, neck spasms typically go away between 5-7 days. If you are still feeling pain after this time, then physical therapy is your alternative option. The duration of physical therapy varies and is dependent on the severity of your pain. In most instances chronic neck pain may last for a span of 3 months onwards. There are instances when physical therapy should be avoided, this includes significant spinal instability serious underlying medical issues, in addition to the patient’s body type would not tolerate the treatment well. In instances where the pain is moderate, simple stretches, and aerobic exercises are recommended based on the preference of the

patient. Outside of therapy, patients are encouraged to avoid standing for a long period, wear shoes with cushioned soles, make sure you have a firm mattress and supportive pillows, and learn to relax as much as possible.

### **3. Results**

Prevention is always the best option in alleviating a problem. There are various preventative measures that you may take such as ensuring you are sitting on a reclining chair while working, standing, and stretching to ensure your blood keeps flowing, in addition to mild exercises such as walking. However, if you become a victim of workplace neck spasms due to either lack of movement or posture while seated, there are varying exercises and treatments options available to get you right back on track. If you are experiencing mild pain, you may try home remedies such as simple and scalene stretches. It is always a good idea to seek professional help when you come to the realization that home remedies are not doing what they are supposed to do. A physical therapist may recommend a varying range of exercises that may be beneficial in extinguishing the pain. However, in circumstances when the pain is too much to bear, surgery may be considered. Find a balance, throughout your daily work routine to relax while you work.

### **4. Conclusion**

Neck spasm is a common complaint presenting to primary, orthopedic, and other musculoskeletal specialists. The prognosis is very good for most patients. The clinician should perform a detailed history (which includes an assessment for red flags), perform a comprehensive examination, and obtain imaging studies only when supported by the history and physical examination. A working diagnosis based on the history and physical examination is often sufficient to guide the physician in determining a comprehensive treatment plan. This should be explained to the patient. Treatments include active physical therapy, medications, and in some cases injections to facilitate an active therapy plan. The goals of treatment are pain reduction and return of daily function. This should include a discharge to an independent home exercise and self-management program, which avoids an overreliance on passive treatments and repeated visiting to healthcare clinicians.

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