



NECK PAIN

DESCRIPTION: There are many different reasons for developing neck pain. Not only can the pain be present in the neck itself, but symptoms such as headaches or pain, tingling, and/or numbness into the upper extremity, can be related to the neck.

- **Injuries:** Sports-related injuries, car accidents, or falls can cause a neck sprain (often called “whiplash”). When the neck is forced to move beyond the normal range of motion, muscles, ligaments, and other soft tissues are stretched. This may cause pain, swelling, and limited motion.
- **Posture:** The spine needs to be in balance with the line of gravity. Weak musculature of the trunk and neck or poor postural alignment (head forward, repetitive leaning over, hunched shoulders, or looking in one direction) can create muscular fatigue, joint compression, or musculoskeletal imbalances. This may result in tightness or pain.
- **Emotional stress:** Stress can contribute to holding patterns in the neck by contracting the neck/shoulder muscles. This may aggravate or prolong healing of an existing neck injury.
- **Wear and tear:** With age, the spine undergoes changes in the discs and joints which can be exacerbated by lifelong poor posture. The degeneration of the discs and joints often creates stiffness or swelling, and may cause impingement of the nerve root at one or several levels in the spine.

TREATMENT: Neck injuries must be rehabilitated in order to prevent re-injury or a chronic problem. There are many things to consider that will help, regardless of the reason for the neck pain.

1) Postural awareness:

Maintain proper postural alignment throughout the day in order to decrease any strain created on your neck (fig. 1-8).

2) Control swelling and pain:

With an acute injury (first 2-3 days) start with:

- **Rest:** Lie down on your back with a thin pillow or lie down on your side with a thicker pillow to support the neck. This will relieve the pressure and relax any tight muscles.
- **Ice:** Use a bag of crushed ice or frozen vegetables for 20 minutes. Repeat 4-5 times daily. The ice will help decrease swelling and muscle spasms.

3) Encourage pain-free movement:

After an injury, your neck will become stiff. Gentle movements starting as soon as possible will help to regain full range of motion, reduce pain from swelling and muscle spasms, and prevent your muscles from becoming weak (fig. 9-12).

4) Relaxation and stretching:

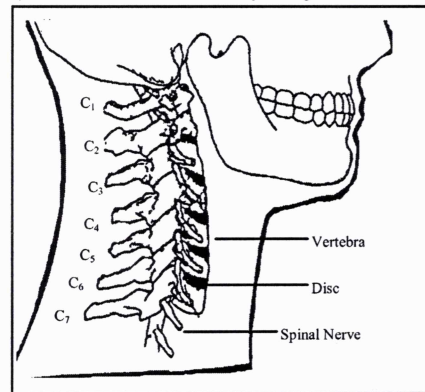
After the acute phase, it is necessary to relax and stretch the neck muscles. A massage or lying down and applying heat before stretching exercises will assist in relaxing sore muscles and increasing the circulation in the general area. To self-massage, gently rub your neck with your fingers for several minutes. Alternatively, heat can be applied for 10-15 minutes by taking a warm shower, using a moist warm towel, or using a heating pad. Stretching exercises can help to relax the neck muscles and restore range of motion (fig. 13-14).

5) Strengthening and stabilizing the neck:

To regain/maintain good posture, your neck needs the support of neck, shoulder, and trunk musculature. Simple exercises done every day will build that essential support (fig. 15-16).

6) Prevention:

- Posture! Posture! Posture!
- Place your work at eye level to avoid awkward postures.
- Take frequent breaks (every 30 minutes) and do stretching and range of motion exercises.
- Sleep on a firm mattress. Use a thin pillow to lie on your back or a thick pillow to lie on your side. This will keep your neck in alignment with your spine. Avoid sleeping on your stomach (fig. 5-6).



EXERCISES: (see back)

- Perform the prescribed exercises slowly while maintaining good postural alignment. Return to neutral after each repetition.
- You may feel a stretch or slight discomfort with the exercises; do not move into pain. Your symptoms should not intensify as a result of doing your exercises.
- Perform the indicated exercises 2-3 times/day. Repeat each exercise 5-10 times. Be sure to breathe throughout the exercises.

POSTURE

Correct Neck Posture (fig. 1)



Incorrect Neck Posture (fig. 2)



Correct Sitting Posture (fig. 3)



Incorrect Sitting Posture (fig. 4)



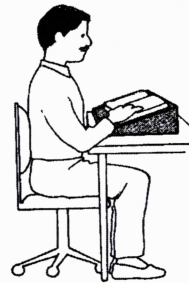
Correct Sleeping Posture (fig. 5)



Incorrect Sleeping Posture (fig. 6)



Correct Reading Posture (fig. 7)



Incorrect Reading Posture (fig. 8)



ACTIVE RANGE OF MOTION



Rotation (fig. 9)



Turn head to each side as if you were looking over your shoulder. Keep face perpendicular to ground.



Side Bending (fig. 10)



Face parallel to a wall/mirror. Bend head sideways, bringing ear towards the shoulder.



Forward Bending (fig. 11)



Tuck chin in, bringing head forward towards chest.



Shoulder Rolls (fig. 12)



Make a circular motion with the shoulder girdle by gently shrugging the shoulders up, squeezing the shoulder blades together, and then rolling them down and around as far as possible.

STRETCHING EXERCISES (hold each for 20 seconds)



Levator Scapula Stretch (fig. 13)



To stretch the right side: Place right hand behind head with elbow pointing upwards. Bring chin towards left chest.



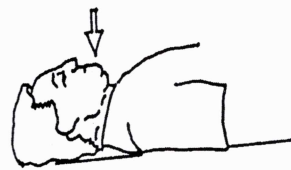
Upper Trapezius Stretch (fig. 14)



To stretch the left side: Drop the left shoulder down. Tilt right ear to right shoulder.



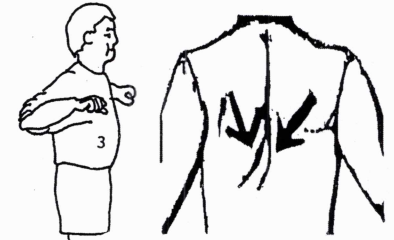
Chin Tucks (supine) (fig. 15)



Lie on your back. (Your head may be supported by a towel roll.) Nod head, bringing chin towards throat.



Shoulder Blade Squeeze



Squeeze or pinch shoulder blades down and together. Keep chin tucked, chest out, and lower back flat.

STRENGTHENING EXERCISES (hold each for 10 seconds)