Cervical Vertebrae and Neck Health



While the most common reasons for neck pain include overuse, injury, and wear and tear, it's not a surprise that recreational activities, work-related tasks, and home projects are the primary causes. The anatomy of the neck includes joints, 7 cervical vertebrae, discs to absorb shock, and supporting muscles and ligaments around the spine.

Neck pain and stiffness often spreads from the base of the skull, to shoulders, to upper back, and arms or causes headaches. Chronic neck pain can be a sign something more serious. Schedule an appointment with a health care provider

if numbness or tingling runs down the neck and into the arms, especially if dysfunction of the bowel or bladder begins. If you have been cleared by your physician with a non-serious neck condition, here are some great tips to help care for your neck through the years.

Neck Pain Prevention

- Avoid tipping the head all the way back to look up
- Avoid slouching and forward head posture while texting
- Avoid resting the head on hands
- Move often from sitting positions to stretch out the neck
- Adjust the top of the computer monitor to eye level
- Use a document holder at the same height of the computer monitor
- Use a headset or speaker phone
- Adjust the car seat to support the head and lower back
- Adjust the steering wheel to allow for bent, flexed arms
- Lift heavy objects using the knees and not the back
- Use a cervical pillow to keep the neck straight rather than using 2 pillows
- Do not sleep on the stomach
- When reading in bed, prop books up or use a wedge pillow to support the arms
- Practice relaxation techniques or get a massage to relieve stress
- Maintain a healthy body weight
- Practice neck strengthening exercises —- See page 2 for Exercises to Practice!

Heavy Heads

The average human head weighs 10-12 pounds. Positionally speaking, the head carries more weight on the neck when it is tilted forward versus in neutral position with ears over the shoulders. The forward head tilt of someone texting increases the possibility of disc compression, chronic neck pain, shoulder pain, and headaches.

Degree of Forward	Pounds of Pressure
Head Tilt	on Cervical Vertebrae
0°	10-12 lbs
15°	27 lbs
30°	40 lbs
45°	49 lbs
60°	60 lbs

Strength Training & Stretching Treats Chronic Neck Pain

Degeneration or injury between the cervical vertebrae joints usually results in cervical arthritis. The symptoms of neck arthritis include chronic pain, muscle weakness, numbness, stiffness, headaches, and loss of balance.

Chronic neck pain care has previously focused on stretching exercises alone. Research has identified that strength training of the neck and shoulder muscles provide effective relief regardless of the cause of the pain. "A randomized, controlled trial at Punkaharju Rehabilitation Center in Finland showed that 3/4 of the women reported "considerable or complete" pain relief. One year after the study, the women's improved neck strength remained and range of motion was 10 times better than the control group."

Strength Exercises







Down into the Floor

Isometric Head Presses:

With head in a neutral position (ears over shoulders), firmly press your hand against your head to create a resistance against one another. Hold for 10 seconds, then relax. Repeat two more times.



In upright position, hold the underside of a chair. Lean the body and head in the opposite direction. Hold for 30 seconds.

Stretches



Look over shoulder. Allow the head to follow the eyes as far as possible. Hold for 30 seconds.

May try Optional.

Resting head on the floor, look over shoulder. Allow the head to follow the eyes as far as possible. Hold for 30 seconds.

May try Optional.

OPTIONAL Description: For a deeper stretch gently press 1 to 2 fingers on the chin to assist a further range of motion.