Cervical Pain and the Deep Neck Flexors

While everyone from the local gyms to your healthcare practitioner talks about strengthening the "core" muscles to prevent or cure lower back pain, we rarely hear anyone speak of the other "core" muscles that need to be strengthened to help reduce or relieve neck pain.

Research shows that approximately 70% of people will experience neck pain at some point in their life. This is almost the same number of incidences statistically of people that will experience lower back pain, but neck pain is not as widely discussed. This is a shame as neck pain can be just as debilitating as lumbar pain and as easily helped. The causes of injury are numerous ranging from trauma from a motor vehicle accident to a simple sprain or strain from a recreational activity. Any degree of injury has been shown to inhibit the recruitment and strength of the muscles in your neck. We call these muscles the Deep Neck Flexors and they've been shown to be one cause of loss of cervical range of motion, headaches and chronic neck pain.

The deep neck flexors are small stabilizing muscles located on the anterior (front) and anterior-lateral (front and off to the side) surfaces of the cervical spine and are deep to the Sternocleidomastoid muscle.

The deep neck flexor muscles are identified as the Longus Capitis and Longus Colli muscles. The location of the deep neck flexor muscles suggest they play an important role in stabilizing the cervical spine. Researchers have reported that the Longus Colli and muscles located on the posterior (back) of the neck form a sleeve that stabilize the cervical spine in
all positions against the effects of gravity. Therefore, if muscle recruitment is impaired the balance between the stabilizers on the front and the back of the neck will be disrupted. This will cause loss of proper alignment of the spinal segments and a posture that could lead to cervical pain.

Now that we have covered the anatomy and the functions of these muscles, let’s go to the exercises that make them function properly. A simple exercise have been shown in research to be the most effective in recruiting the deep neck flexors. You don’t need any equipment for this exercise – The Chin Tuck. It is great to encourage good neck posture and re-train and strengthen these muscles after injury.

Start this exercise gently with Step 1 – you might stand against a wall so the retraction is just until you head touches the wall. Hold this while breathing normally for 10 seconds and repeat this 10 times. You can hold for longer as you become stronger. When you are comfortable you can include the neck tuck after retraction. It is only a small movement and
you can repeat the hold and repetitions of the retraction drill. You will feel some stretching in the muscles at the back of your neck.

Exercising with the NeckTEK you can use the adjustable elastic resistance to strengthen your ability to retract and hold. This can be done lying, sitting or standing.

Research has shown that your endurance in maintaining good neck posture will reduce chronic neck pain and headaches. NeckTEK helps you increase your endurance.

IMPORTANT

It cannot be over emphasized that these exercises should be performed in a painfree range of motion. If you are having difficulty doing these exercises without pain, then please consult your physiotherapist. They can help you master these exercises.