Optimal Neck Posture and Poke Neck Exercise Progressions

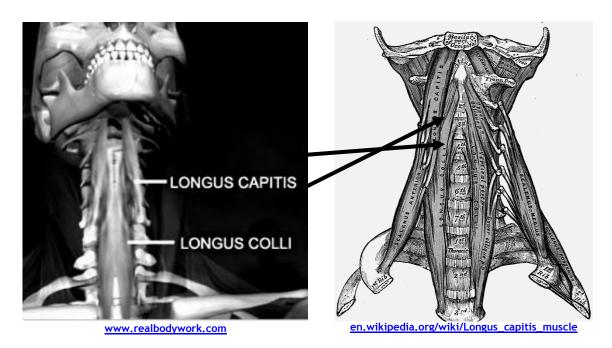
MUSCLES RESPONSIBLE FOR OPTIMAL NECK POSTURE DEEP INNER MUSCLES - ANTERIOR

Similar to the lumbar spine, the cervical spine uses deep musculature to ensure inter-segmental spinal control. That is, the control of one vertebrae in relation to one another. These deep anterior neck muscles are known as the

"Deep Neck Flexors" (DNF's)- Longus Colli and Longus Capitus.

They sit right in front (anterior) to the spine (deep in the neck) and are involved in providing stability throughout the full cervical flexion range. In addition, they are responsible <u>for initiating or starting neck flexion</u>. That is, just lifting you head up of the floor from a supine position.

The deep neck flexor's (DNF) role is to reduce the shearing forces across the cervical facet joints and discs, thereby reducing risk of overuse injuries. It also helps to support the optimal neck posture. The stability that the DNF's provides, is very important for client's with a poke neck postures, computer/office workers, drivers, new mothers and so on.



Weak deep neck flexor muscles are evident by a small head lag during sit ups when your client lifts the head off the floor, or when they are in a plank position and the head drops down into a poke neck posture position. Keep a watchful eye on your clients.

Exercises to help strengthen the DNF are extremely important, and require a lot of patience to perform them correctly. In general, the idea is the teach your client to relax their sternocleidomastoid at rest and during the very initial "nod" of cervical flexion. Recruiting ONLY the Deep Neck Flexors to perform this small controlled movement. (Just like the struggle to activate transversus abdominus prior to rectus abdominus in trunk flexion.) This is the toughest step and usually conducted in a one on one situation. Using pressure biofeedback machines to assist in this step is very beneficial as well.

It is quite tricky, and to be successful in rehabilitation the neck may require knowledge of injuries, breathing techniques, relaxation techniques and massage releases to aid in reducing SCM tension. Progressing the exercises from this beginner exercise through to isometric and full range cervical flexion takes time and patience.

merrin martin

B.App.Sc.(Physiotherapy)
B.Sp.Sc.(Exercise Science)
Cert IV Fitness
Cert IV Workplace Assessment & Training
Cert IV Pilates Instructor
M.A.P.A

Poke Neck Posture Exercise Progressions

Aim: Cervical Spine Stability & Postural Correction

Guidelines:

Note that this is only a guideline. Your client's level of skill and health will determine where they should begin an exercise program. These exercise progressions may not be appropriate for everyone. If you are unsure as to whether your client is ready to start an exercise program consult a physician. The developers of these guidelines take no responsibility or liability for any harm or injury occurring from undertaking the exercises below.

In order to commence this neck progressions exercise routine the client must have the appropriate flexibility and core recruitment and stability. Ensure that your client is able to do everything on the Core Activation sheet before attempting this program.

Exercise Description	Exercise Picture
Cervical Spine Relaxation Position	
 Ensure ball is positioned centrally under lower cervical spine Neck muscle are totally relaxed Shoulders and chest relaxed Breathing diaphragmatically - takes 10 breaths Goal: Breathing diaphragmatically - takes 10 breaths Progress onto Deep Neck Flexor Muscle Activation 	
Level 2: Deep Neck Flexor Muscle Activation	
 Slowly lengthening up the back of the head to flex the head and bring chin towards chest Feel that your outer neck muscles are NOT activating - keep relaxed Keep movement very small and controlled Ensure there is no shoulder activation 	
Goal: Hold for 5 secs build up to 10 secs - repeat x10 Progress onto Deep Neck Flexor with head lift varying height.	

Level 3: Elevated Head Nods (2 pillows)

- Similar to the previous exercise with the head supported by 2 pillows / & ball
- Slowly lengthening up the back of the head to flex the head and bring chin towards chest activating the Deep Neck Flexors
- Then lift the whole head off the pillows
- Keep movement very small and controlled



Level 4: Elevated Head Nods (1 pillow)

- These exercises can be done with or without the chi ball placed in the small of the neck.
- Can be held for 5-10 seconds

Goal: 3 sets of 10 Reps

Level 5: Head Nods (ground)

- Similar to the 1 pillow version but from the ground
- From the floor, slowly activate DNF's, increase range of flexion, then left head from floor. This is a greater load as the client must lift from a lower point

Goal: 3 sets of 10 Reps

Level 6: Abdominal Curl (Ground)

- Set the client up as in the above exercise
- Activate the Core
- Activate the Deep Neck Flexors as above
- Then lift the shoulders off the ground to incorporate the abdominal flexors

Goal: 3 sets of 10 reps.

Simultaneously incorporate the 4pt Core Series of Exercises

Level 7: Abdominal Curl (Fit Ball)

- Set the client up with the lower back supported by a ball
- Activate the Core Muscles
- Activate the Deep Neck Flexors as above
- Roll the chin in then activate the abdominal flexors till fully contracted
- Lower to the start position and repeat

Goal: 3 sets of 10 reps









