

Hatha Yoga as Physical Therapy for Neck and Shoulder Pain

Forward head posture is very common today. We are so visually oriented. As we focus on all the visual stimuli in our world, we lean forward into it, as if we are pulled into it. Whether standing or sitting, we collapse our heads forward on top of our dull spines. The epitome is the forward head on top of the infamous dowager hump and the stiff, puffy seventh cervical vertebra.

We have to hold our forward heads up by chronically tensing the elevator scapula and upper trapezius muscles. It stands to reason that we would then have a prevalence of soft tissue pain along the occipital ridge, sides of neck, and the top of the shoulder blades. These are phasic muscles not designed for sustained postural work.

Forward head posture is responsible in part for a relative inflexibility in our cervical spines. The muscular tension of the occipital ridge restricts the movement of the upper cervical vertebrae. A stiff thoracic spine influences the lower cervical spine to be hypomobile also. Therefore we tend to move excessively in the mid cervical spine. This tends to wear down the facets and disks leading to cervical spondylosis and cervical disk degeneration. There is abnormal mechanical movement stress to these structures since the upper and lower cervical vertebrae do not contribute enough to the overall movement of the neck. Put this on top of a thoracic spine that does not move enough, and the mid cervical spine is left alone with the lowest lumbar spine to account for the majority of the total spinal movement.

Some will elevate their arm overhead, only to impinge their shoulder. The shoulder blades are poorly stabilized against the rib cage of this unskillful spine. The rotator cuff muscles cannot effectively cinch the head of the humerus inferiorly to avoid impingement. As the humerus rolls upwards within the glenoid fossa, it must glide downward in the opposite direction to avoid compressing the rotator cuff against the acromioclavicular shelf.

A yogic view is that the entire body must support the posture of the head and the movement of the arm. We cannot just retract our heads back onto a dull or tense unskillful body to relieve symptoms. The legs, pelvis and spine are the foundation of the movement of the head and arms. A major league pitcher and a professional golfer are examples of skillful use of the entire body to throw a baseball or swing a club at the highest levels of performance. Whether towards this goal or just reaching for a can of soup off the top shelf, we need to consider movement as a whole.

Yoga trains us to do this exact thing. As the lower extremities ground, and the pelvis centers, the spine lifts. The upper thoracic and lower cervical spine needs to mildly backbend instead of excessively at the more mobile mid cervical and lower lumbar vertebrae. We are essentially bringing the body forward under the head, not the other way around. The head is to be supported by the entire body.

The spine must be skillful before the scapula can do their job. The yogi can train the shoulder blades to stabilize against the rib wall with the inner edge and bottom tip of the shoulders moving into the rib wall, while keeping the shoulder blades wide [not retracted]. Controlling the scapula against increased premature elevation and winging, the rotator cuff can be more

effective in their cinching function.

Once again, chest openers are a prerequisite to skillful motor behavior. The passive extension of the thoracic spine will put an indirect backbend force on the lower cervical spine. Attention must be directed to keeping the cervical spine long with the traction applied by pulling on one's head with their hands.

One can perform an active bridge pose while coming out of the chest opener. This activates the inner edges and bottom tips of the scapula to lift the ribs and spine into an upper chest backbend. The action should not be overdone with retraction tension between the shoulder blades. This action is part of the scapular stabilization needed in upright for skillful arm elevation.

Upper extremity weight bearing of Downward Facing Dog Pose is a fundamental provocative pose for neck and shoulder issues. We so easily resort to levator and upper trap tension to weight bear through our arms. With care, one can learn to bear their weight through their arms with slightly backbending upper thoracic/ lower cervical spine, stable shoulder blades, and seated humeral heads. It is actually easier to actively increase elevation with the closed kinetic chain activity of Dog pose than the open kinetic chain activity of arm elevation in standing. It is more difficult to facilitate the extending upper spine, scapular stabilization, and downward glide of humerus while standing. In standing the spine is stabilized with the inner action of lengthening. The entire body has to work well to lift the spine. We have easier access to the necessary foundation actions for arm elevation in closed chain situations.

But eventually one must work on the more difficult open chain arm elevation. The heels must be grounding, the pelvis neutral, so the belly can activate the spine. The head is floating over this active skillful body. The scapulas are then called on to stabilize to handle the load of upper extremity activity. The slight backbend in the upper thoracic spine facilitates the scapulae stabilization against the rib wall. And the inner edge and bottom tip of scapula moving into the rib wall facilitates the upper thoracic backbend.

Then the rotator cuff can cinch the humerus head in an inferior glide effectively, when the scapula is stable. The scapula is stable when the upper thoracic spine is extended. The upper thoracic spine is extended when the lumbar spine has lengthened in slight extension, the pelvis neutral, and the lower extremities rooting into the floor. The whole body is needed to support the skillful movement of the upper extremities.

It is difficult to work on neck and shoulder issues until the rest of the body is skillful. First work with supine lengthwise and crosswise chest openers. Then supported and active bridge poses are active backbending poses. Weight bearing Down and Up Dog poses are best introduced before upright and arm elevation activities. Standing poses are good ways to introduce arm elevation.

Neck and shoulder movements must be facilitated as part of whole body movement

.Stan Andrzejewski PT