

Playing Pain-Free
Southeast Horn Workshop
Vanderbilt University, Nashville, TN
March 13, 2016
Karen Hansen, PT, DPT, CEAS, Cert. Vestibular Rehab
Tennessee Therapy & Balance Center, LLC

Ideal Standing Alignment

- * Ears over shoulders
- * Shoulders level
- * Shoulders over hips
- * Hips over ankles
- * Three normal curves in spine
- * Chin slightly tucked and level
wall/ pelvic tilt/ step away from wall

Ideal Sitting Posture

As above except:

- * Knees level or slightly lower than hips
- * Feet resting flat on floor or foot rest
- * Back supported by back rest

Forward head position

Increased cervical spine compressive forces for every inch the head moves forward. If our head weighs 12 lbs and our head is one inch forward, the lower neck feels 32 lbs of pressure from the head. 2 inches= 42 lbs pressure. The more weight the muscles have to exert holding the head up, the less strength available for outside loads, such as holding up an instrument. Just cause spine in alignment, doesn't mean muscles are balanced

Ideal playing position

- * Alignment of spine as above
- * Position mouthpiece to reduce excessive gliding of the TMJs
- * Don't rest weight of instrument on mouth
- * Equal weight distribution of instrument between hands

Carpal Tunnel

- * Formed by the carpal bones and a fibrous band called the flexor retinaculum
- * Contains tendons, nerve and blood vessels

Carpal Tunnel Syndrome?

- * Tendons have synovial sheaths around them
- * There is a small amount of friction as the tendons move in the sheaths
- * Excessive repetitions can cause tendons or sheaths to swell
- * The carpal tunnel does not expand, therefore nerves and blood vessels are compressed
- * Direct pressure on the carpal tunnel will also increase friction to tendons and compress the nerve
- * Symptoms include numbness, pins and needles, weakness, and pain

Warning signs of acute injury

- * Pain
- * Swelling
- * Warmth
- * Redness
- * Numbness
- * Tingling

Four stages of tissue injury (symptoms can be any of the above warning signs)

- * 1st stage: Symptom begins after playing
- * 2nd stage: Symptom begins during playing and goes away after
- * 3rd stage: Symptom begins while playing and does not go away for awhile afterward
- * 4th stage: Symptom occurs all the time

Exercises

- * Practicing
- * Stretching
- * Strengthening