

Physical Therapy, Rehabilitation and Sports Medicine

7 TIPS TO HELP YOU PLAY!

Preventing Injury in the Musician

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Pain is defined as an unpleasant sensation and emotional experience associated with actual or potential tissue damage. It can be described as sharp, throbbing, electrical, dull, shooting, achy, burning or sore. Paresthesia is the medical term describing tingling, pricking or “pins and needles” sensation. It is most commonly caused by pressure on a nerve. Knowing something about your body’s anatomy and how it functions can help you prevent these symptoms. There is some truth in “the longer you have pain, the harder it is to get rid of it.” The best cure is prevention!

TIP 1 THE HEAD AND SPINE

Good posture is the foundation to injury prevention of the spine and upper extremities. You should think of the concept: “Ear over shoulder over waist. Think tall!” Avoid holding unnecessary tension in your body (e.g. unconscious shrugging of shoulders, clenching your fist or teeth). Where is your music when you practice? During practice sessions, if possible, raise the music stand to a comfortable level to correct posture. Consider occasionally standing when practicing, if your instrument allows it. String instrument players are more susceptible to poor neck biomechanics and tight musculature. Correct stretching of the neck muscles is imperative.

TIP 2 THE SHOULDER AND SHOULDER GIRDLE

The shoulder and shoulder girdle are the anchor to the upper extremity including the hand. They can raise your arm above your head to the best of their ability when you are standing up straight (see above). Slouching allows impingement of the rotator cuff muscles. It is important to have good strength of the shoulder muscles (rotator cuff muscles and muscles that stabilize the shoulder blade) and core strength. Most people, including musicians, have weakness in this area. When possible, allow the larger muscles to work for you. An example of this is when playing the piano, rock towards the direction of the keyboard to avoid overreaching with the upper extremity.

TIP 3 THE ELBOW

Good strength and flexibility of the shoulder assist in preventing tendonitis at the level of the elbow. When possible, position the elbow between 100-110 degrees (a position of comfort). This takes tension off of the forearm muscles, which control the wrist and hand. A wrist neutral position (wrist straight or slightly extended) is the preferred posture to avoid tendonitis such as tennis elbow. Avoid keeping your elbow bent for long periods of time or leaning on the elbow. These positions put more pressure on the ulnar nerve (your funny bone) which can cause tingling into your little and ring fingers. Appropriate stretches of forearm muscles help in the prevention of injury.

TIP 4 THE WRIST

A healthy position of the wrist is in neutral (straight or slightly extended). This helps to prevent injuries such as Carpal Tunnel Syndrome. A bent wrist position for extended periods can increase pressure on the median nerve in your carpal tunnel, causing pain into your hand and tingling into the thumb, index, middle and/or half of the ring finger. Keeping your forearm in a palm up position (supinated) creates pressure in the carpal tunnel also. Individuals sometimes do this when sleeping at night or when holding handheld electronics such as a cell phone. Avoid wearing tight watches or bracelets. Gentle stretching techniques can help facilitate injury prevention.



TIP 5

THE HAND AND THUMB

Everything you were taught about the wrist carries over to the hand. The position of the wrist dictates how effectively the hand can work. The thumb is 50% use of your hand. When you pinch the tip of your thumb to your index and middle finger with one pound, this is magnified to 13 lbs. at the base of your thumb (the carpal metacarpal joint). The joint at the base of your thumb is a “wear and tear” joint, often the first sight of arthritis. Avoid excessive pinching and gripping. We pinch more than we think! Many musical instruments require more of a pinch than a grip. How much force does it take to press that string or key? More is not necessarily better! Many musicians do not have a good balance of strength between the intrinsic muscles (those muscles inside the hand) and extrinsic hand muscles (those muscles that control the hand but lie outside of the hand). Good strength and flexibility are warranted to prevent injury. However, of more importance is knowing when not to strengthen!

TIP 6

GENERAL WELLNESS PRINCIPLES FOR MUSICIANS

When an activity calls for coming out of the neutral positions discussed, when able, get back into the baseline postures! Avoid repetitive motion and long sustained postures when able. Take minibreaks (seconds of getting out of one position). Vibration can aggravate tendons and nerves; avoid prolonged exposure to it. For the musician, practice time should include warmup, big arm movements, stretches (before, during, and after, if able), breaks and good technique. The instrument should be in good condition. Know your limits! Pace yourself: alternate repertoire, vary repertoire, increase practice load gradually, take breaks every 20 minutes; reduce practice intensity before and after performance.

TIP 7

TAKE CARE OF YOURSELF OFF THE INSTRUMENT

Exercise including aerobic exercise is very individually based. Consult your Medical Provider about what exercises are right for you! Hydration, nutrition, sleep and stress management should also be addressed. If you are experiencing symptoms, “nip them in the bud!”



If you are experiencing symptoms, please contact our Hand Therapy Program—our team specializes in treating musician injuries and can help you find relief.

A medical provider's prescription for treatment is required.

For more information, please call 610.738.2480.

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