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Hand Cramps (Focal Dystonias)

Hand cramps, sometimes referred to as writers' cramps or musicians' cramps, are types of nerve disorders. Unwanted movements (spasms) or muscle aches (cramps) of hand muscles may occur when writing or playing a musical instrument, although they may also occur during other specific, fastmoving hand tasks. Technically, hand cramps or spasms are called task-specific focal dystonias.

Hand cramps and muscle spasms are much more common in men than women. Professionals may be more prone to hand cramps because they play at higher intensity, for a longer duration and more complex pieces. Thus, they may have more cycles of movement that irritate the nerve to the hand.

Causes

Several factors play a part in hand cramps. Common causes include:

- Increase in time playing an instrument (for example, piano or guitar) or performing a specific task
- Increase in more complicated motions
- Increase in the amount of writing
- Increase in the force required for writing (for example, multiple carbons)
- Increase in the type of pen or pencil while writing
- Change in the technique of practicing the same instrument or task
- Change in the size of the same kind of instrument or tool
- Increase in anxiety
- Some genetic factors

In general, intense and repetitive activities result in hand cramps or spasms. In many cases, hand cramps occur after doing the same activity for years. In these cases, the unwanted movement may begin only after, for example, a long, intense practice or writing session. But over time, the hand cramps may occur more and more quickly. When more severe, just picking up a pen, instrument or other object can cause the hand cramps.

While the use of computers is now extremely common in the workplace and home, computer use has not been found to cause hand cramps.

Signs and Symptoms

Hand cramps are usually painless. Hand cramps are not the same for all people. They may come in different forms, including:

- A finger straightening and losing a grip on the pen or pencil (common in writers' cramps)
- Finger(s) feeling uncoordinated (common in piano and guitar players)

• A finger either straightening or bending at the wrong time

For musicians, a symptom of hand cramps may also include anxiety. It may make them afraid to perform. Some musicians have to restrict their performance style by playing with only the unaffected hand. In the case of musicians, for example, those who get paid to play are more at risk than people who play for fun.

Treatment

People often seek medical attention for hand cramps if the symptoms are seriously interfering with important tasks. They can be treated by neurologists, psychologists, rehabilitation specialists, hand surgeons and hand therapists. Many times, these professionals will provide a combined approach to diagnosis and therapies. They may be advertised as a "Clinic for the Performing Artist".

Treatment for hand cramps is variable. Typically, because the problem lies within the brain and nerves, there is typically no hand surgery to help these cramps. Prevention is the best form of treatment. This may mean evaluating the position of the hands during work or avoiding intense or prolonged practice or writing sessions (or the repetitive task that is causing the cramps). Sometimes resting from the aggravating work and doing other activities has been helpful. It is like "cross-training" to use different movements to add variety.

Other treatment options may include:

- **Medications**: The success is uncertain with medications. There are often undesirable side effects, but it has provided good results for some.
- **Botulinum toxin injections**: These have been helpful in reducing some unwanted movements, but the results are not always long-lasting. The injections may result in hand weakness.
- Hand/finger splinting: Splints will restrict your motion, forcing you to use other muscles or fingers to do a task. This can help retrain the brain.
- Psychotherapy: Evaluating stressors and working to re-train the brain function with the hand muscles.

Rehabilitation through motor training is another treatment option that has improved symptoms. Even touching many different objects or textures has been helpful. Brain stimulation alone has not given predictable results and is still considered experimental.

You should discuss the best treatment option for you with your doctor and/or therapist.

