

TWITCHING

Ask the Doctor

Q: Many people who have twitching fear that they've ALS because it's often associated with the disease. When someone has a lot of twitching, even daily, can this be the beginning of ALS?

A: Twitching occur frequently, especially when people drink too much coffee, or have too much stress and not enough sleep. Does this sound familiar?

Of course, the first thing people do when they've symptoms run to the computer to see what Dr. Google has to say about it. I've recently done it and got 1,390,000 results in 0.25 seconds. One of the very first items that appeared was a Wikipedia Definition leading to the term "fasciculation" (which stands for muscle contractions), suggesting that the symptoms could be associated with ALS. And then of course it's normal to panic. So, if you're not under stress before you went on the Internet, it would certainly be the case after consulting Dr. Google.

But wait. There are many reasons that can cause muscle contractions, including fatigue, anxiety, or even a clamping nerve in the neck. Muscle spasms, as well, are very common, and can occur because of an overload or even dehydration. Just look at a basketball game: apparently there's always someone on the ground with significant muscle cramps.

Symptoms such as muscle spasms and muscle cramps don't mean much by itself; they are very common and non-specific. To diagnose ALS a doctor look for signs of progressive muscle weakness.

What causes fasciculation? They arise on the ends of the nerves, called axons, where they come in close contact with the muscle. The ends of the axons are suspected of being hypersensitive to depolarization (electrical discharge), which triggers a muscle to contract. When a nerve is discharged, every day immense frequent on command, then begins an electrical impulse in the nerve, moves in the direction of the muscle, triggers the

release of a chemical substance (acetylcholine) which "swims" across the gap between the nerve axon and the muscle and settles on a receptor on the muscle and that causes a discharge (and therefore contraction). The complicated process takes only a small fraction of a second to complete. When something happens involuntarily, contracting muscle fibers unintentionally - and causes muscle twitching or fasciculation!

Some people with ALS wonder whether the presence of twitching means they have a bad or rapidly progressing form of the disease. In fact, having fasciculation doesn't correlate with how quickly exhibits the disease progression.

I would suggest that people with fasciculation or muscle cramps wait several months - though there's no hard or fixed rule - before applying for a medical examination. Often simply stop themselves the fasciculation or cramps. If not so, then it makes sense your problem to be examined.

An internist or neurologist will ask you some questions, want to hear more about what you've experienced, and keep your limb in a relaxed position to study draws. He or she then could ask for a muscle test (EMG) to understand better what is going on. Blood tests may also be needed.

Often the results will appear normal but the doctor will suggest to wait a little longer to see if there's anything further developed over the coming months. Even in the 21st century, there is sometimes no single test or procedure that can give you a clear answer about a problem. With fasciculation this is certainly the case.

Waiting is a challenge for most people, the changes are strongly in favor of not having ALS. Like they say "common things are common" and ALS is not very common, especially in comparison with excessive coffee consumption and stress.

Translation: **Marina**