How to ace tennis elbow

It's a gripping problem for many, but the good news is that most people can recover without surgery

► The specialist: Dr. Michael Hausman on elbow reconstructive surgery

The chief of hand and elbow surgery at Mount Sinai, Hausman has been working in the field for 25 years.

► Who’s at risk

Tennis elbow is an overuse injury that will affect about 50% of the population by the age of 60. "Tennis elbow causes a pain on the outside, or technically, the lateral, part of the elbow," says Hausman. "It tends to be worse with activities that involve gripping and heavy use of the hand and wrist — such as using the elbow heavily as a contributing factor." As a result of recent research, Hausman and others believe that a pre-existing anatomical variation in the elbow predisposes some people to develop tennis elbow.

As the name suggests, it can result from tennis, but many other activities can cause this injury. "Most patients with tennis elbow don't play tennis," says Hausman. "The cause can be any racquet sport or weightlifting, particularly free weights, or it can just be carrying heavy shopping bags." Another common cause is carrying boxes during a move.

"You can have symptoms that build gradually, or you can move the apartment and wake up in the middle of the night with excruciating elbow pain," says Hausman.

In the past, men were at much higher risk of tennis elbow than women; at one point, the incidence was three men for every woman. "But that's old data," says Hausman. "And as women have gotten more active and involved with athletics, that gap is narrowing." Your risk is tied directly to your age and level of physical activity. "It's most common in 25-to-50-year-olds, and then it begins to trail off," says Hausman. "That's probably related to the fact that the elbow experiences less vigorous use as people age.

It was long believed that tennis elbow was a form of tendinitis, an inflammation of the tendon, but now the damage is thought to involve a layer of tissue adjacent to the tendon that gets worn and frayed. That finding has made treatment a lot easier for patients. "By sparing the tendons (in surgery), we've been able to improve the treatment outcome, and people get better much more quickly," says Hausman.

► What you can do

Get informed.

There is great information online, thanks to the American Society for Shoulder and Elbow Surgeons (www.assh.org), which has a handy "Find a shoulder or elbow surgeon" search engine. Many of the surgeons in the American Society for Surgery of the Hand (www.assh.org) also treat tennis elbow.

Don't do things that hurt.

That means listening to your body. "If something is causing pain, that's your body's way of telling you you're doing damage," says Hausman. "Don't push through it."

Lift correctly.

To reduce the stress on your muscles and joints, lift with the palm facing up instead of down. "If your palm is facing up, you're using the hand as a hook, and you don't have to grip," says Hausman. "If your palm is facing down, then you also have to grip — that's doubling the requirements on the muscle."

Pay attention to early warning signs.

If you're feeling pain on the outside of your elbow, even minor pain, then rest it. You may be able to prevent a serious injury.

► Signs and symptoms

"There can be pain when you move the elbow, pain with gripping or weakness with gripping. Those are pretty much the symptoms," says Hausman. The pain is on the outside of the elbow, near the bony knob.

► Traditional treatment

The good news is that 75% to 85% of patients are treated successfully. It's also an ailment that most people will recover from without requiring medical or surgical treatment. "The first thing to understand is that most patients will get better spontaneously," says Hausman. Eighty percent of the patients will get better with rest. However, that healing usually takes many months, and many patients aren't willing to wait.

The first line of active treatment is physical therapy, which is frequently requested by the patient. However, doctors haven't reached a consensus about whether physical therapy helps or hurts tennis-elbow patients.

Hausman isn't an advocate of physical therapy: "Given the fact that this is caused by overuse, and having the therapist strengthen the muscle is another form of use, my experience is that this isn't normally successful."

Another minimally invasive treatment is sonic shock-wave therapy, which also hasn't been proven successful in testing.

Corticosteroids are the most popular option for treating tennis elbow. "That probably is effective, and it has some prognostic implications," says Hausman. "A patient whose pain is controlled with one corticosterone injection has a 90% chance of being cured and not needing an operation."

The odds are much worse for patients who require multiple injections — only 45% of them get better without surgery. Because of those odds, "a corticosterone injection is worth giving a chance," says Hausman.

A cutting-edge treatment for tennis elbow is platelet-rich plasma therapy, in which components from the patient's blood are injected back into the patient. "A sample of blood is taken and purified to separate out platelets, which are reintjected into the site of injury," says Hausman. "It's popular, but there's not evidence yet that it's any better than any other treatment."

As for the final option: "If all else fails, the last recourse is surgery," says Hausman. For decades, the traditional operation for tennis elbow was a major one that involved making an incision and cutting out part of the tendon. The recovery period was long, and it meant having the elbow in a cast or sling for weeks afterward. The new arthroscopic tennis-elbow operation spares the tendon and is minimally invasive, so there are pinhole incisions, instead of a big open incision.

In this new treatment, "you can precisely remove the abnormal tissue without sacrificing the tendon," says Hausman. "This is done under local anesthesia, in about an hour, and the patient goes home the same day."

Patients begin using their elbow within 36 hours. Doctors have been performing this arthroscopic operation only since 2003, and not all surgeons are trained to do it. "At this point, the arthroscopic tennis-elbow surgery is practiced more in specialized institutions," says Hausman. "Literally every month, this is becoming more common and more accepted."

► Research breakthroughs

The development of elbow arthroscopy has opened up a new field of knowledge to doctors, allowing them to identify problems that previously were invisible. "We use arthroscopy diagnostically," says Hausman. "There are other ailments that mimic tennis elbow that aren't tennis elbow, or people who have tennis elbow who have additional damage that didn't show up on previous tests."

Thanks to the microscopic camera inserted in arthroscopy, doctors can examine the tissue around the elbow with a high level of magnification that allows them greater precision.

The other big development is the discovery of the anatomical element that predisposes some people to tennis elbow. "There's an anatomical variation — if you don't have it, you can lift all the weights you want, and you're not going to get tennis elbow," says Hausman.

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