

MEDICINE

Chiropractors don't raise stroke risk, study says

Critics allege that rubbing and twisting neck is linked to rare arterial dissection, but Canadian study disputes this

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A Canadian study indicates there is no increased risk related to chiropractic treatment in the heated debate about whether neck adjustments can trigger a rare type of stroke.

Researchers say patients are no more likely to suffer a stroke following a visit to a chiropractor than they would after stepping into their family doctor's office.

The findings, published today in the journal *Spine*, help shed light on earlier studies that had cast a cloud on the chiropractic profession and suggested that their actions resulted in some patients suffering a stroke after treatment.

"We didn't see any increased

association between chiropractic care and usual family physician care, and the stroke," said Frank Silver, one of the researchers and also a professor of medicine at the University of Toronto and director of the University Health Network stroke program.

"The association occurs because patients tend to seek care when they're having neck pain or headache, and sometimes they go to a chiropractor, sometimes they go to a physician. But we didn't see an increased likelihood of them having this type of stroke after seeing a chiropractor."

A rare cause for stroke, arterial dissection occurs when one of the neck arteries supplying blood to the brain is

torn. A stroke can occur when a clot, formed on the torn membrane, is dislodged and subsequently travels to the brain, blocking circulation.

The two neck arteries are susceptible to compression with neck rotation. But it is rare. It occurs spontaneously, or after minimal neck movements, such as looking backward to reverse a car.

Critics charge that the twisting and pulling of the neck frequently done by chiropractors can damage arteries, leading occasionally to stroke.

However, a research paper published in 2001 in the *Canadian Medical Association Journal* found there is only a one-in-5.85-million risk that a chiropractic neck adjustment

will cause a stroke.

In this study, the Canadian team looked at nine years of data in Ontario, and found only 818 patients with this kind of stroke. Unlike the previous study in 2001 that investigated the relationship between chiropractic visits and vertebral artery stroke, researchers in this study also studied visits to family doctors that preceded this kind of stroke.

Dr. Silver said researchers were looking for an increased association between chiropractic care and stroke. Although they found this association, they also discovered it to be the same as when patients visited a family doctor.

The researchers say the asso-

ciation is likely explained by patients seeking medical or chiropractic services for their neck pain rather than these services causing the stroke. In other words, patients had already damaged the artery before seeking help from either a medical doctor or a chiropractor, and then the stroke occurred after the visit.

The research paper says the results should be interpreted cautiously. Although the study provides the best data to date on the relationship between neck manipulation and vertebral artery stroke, researchers have not ruled out that in rare circumstances neck manipulation can be a potential cause of some strokes.

Co-author David Cassidy, a

senior scientist at the University Health Network and a professor of epidemiology at the University of Toronto, said: "If someone says 'Has it ever happened that a chiropractor has caused a stroke?' I can't say it's never happened. But if it's happening, it's not happening at a greater risk than when it is in a GP office."

Looking for symptoms of a stroke caused by a tear inside a neck artery can be difficult. Just because a person has a neck pain or headache doesn't mean it's going to lead to a stroke, Dr. Silver cautioned. Some of the symptoms include double vision associated with pain, droopy eyelids, numbness down one side of the body and dizziness.