

Neck surgery for cervical spine disorders found to alleviate associated headaches

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A new study published in the August 2009 issue of the *Journal of Bone and Joint Surgery* (JBJS) finds that two years after anterior cervical neck operations, patients who have arthroplasty (disc replacement) or arthodesis (spine fusion) can be expected to have significant improvement in their headache symptoms.

"This is not a "cure" for all headaches. But, if you have headaches associated with [neck](#) pain and dysfunction, surgery for the neck problem can significantly improve the related headaches. And, anytime overall quality of life can be improved with surgical treatment, that is something to note." said study lead author, Joseph Riina, MD, of Orthopaedics Indianapolis.

The purpose of this study was to determine:

- the prevalence of headaches in patients with cervical radiculopathy (shooting pain in the arm) or myelopathy (spinal cord dysfunction); and
- the effectiveness of anterior cervical surgery (neck surgery from the front) in relieving [headache](#) symptoms associated with the cervical disease.

This study does not include migraine headaches and only studied headaches associated with cervical spine disease. Additionally, study

authors acknowledge there still is a lack of knowledge regarding the exact anatomical structures that cause headaches, which could be caused by the disc, joints, muscles, tissues or some combination of those.

None of the patients surveyed had the operation to treat their headaches and headaches were not their only complaint. Additionally, no significant difference was reported in headache severity between the arthroplasty and arthodesis groups. The study participants (51.6 percent of whom were male) ranged in age from 25 to 78. The results were as follows:

- Pre-surgery:
 - Of the 1004 patients surveyed, 86.4 percent reported headaches.
 - 34.1 percent reported mild headaches (a 1 or 2 rating on the scale) and
 - 52.1 percent reported severe headaches (a 3, 4 or 5 on the scale.)

- Two years after surgery:
 - Of the 803 patients responding, 65.1 percent reported headaches.
 - 34.9 percent reported no headaches,
 - 46.7 percent reported mild headaches, and
 - 18.4 percent reported severe headaches.

"This is the largest study that we know of, in which incidence and improvement of headaches has been studied related to anterior spine surgery. I think we answered a big question: Can patients have less [neck pain](#) and fewer headaches after this kind of surgery? And, the answer is yes." Said Riina. "We evaluated more than 1000 patients, using the Neck Disability Index questionnaire before surgery and at five increments after surgery, the latest was 24 months post [surgery](#) and the evidence suggests that there can be significant improvements in headache pain."

Source: American Academy of Orthopaedic Surgeons ([news](#) : [web](#))

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