

[IMAGE]

## **Warning: Chronic Back Pain May Shrink the Brain**

If you suffer from chronic back pain, take note: A recent study has revealed that those who suffer from chronic back pain (CBP) for one year may experience a reduction in the brain's gray matter equivalent to the amount lost by the average person in 10 to 20 years of normal aging. Gray matter refers to the darker-colored tissue of the brain composed of the bodies of neurons; it is the "thinking" center of the brain, which is responsible memory and information processing.

Researchers compared 26 CBP patients with 26 matched healthy volunteers. The CBP patients had experienced pain for one year and were diagnosed with musculoskeletal disorders; "pure" radiculopathy (pain, numbness, or tingling of the extremities caused by the nerve roots); and a combination of musculoskeletal and radiculopathic pain. The normal decrease in gray matter was found to be 0.5 percent per year in both groups; however, after adjusting for age and gender, the investigators found that the gray matter in CBP patients decreased by 11 percent. In addition, the longer someone experienced chronic back pain, the more gray matter they lost.

The researchers concluded "that CBP (sustained for six months) is accompanied by abnormal brain chemistry...implying neuronal loss or dysfunction in this region and reduced cognitive abilities on a task that implies abnormal prefrontal processing."

While additional research is warranted, the information from this study should serve as a warning to those with back pain to seek care as soon as possible in order to prevent the condition from becoming chronic. If you suffer from chronic pain, your doctor of chiropractic can help! Ask about a treatment plan to help manage your pain and preserve your gray matter!

For more about this study, read "Chronic Back Pain May Shrink the Brain" at [www.chiroweb.com/archives/23/03/08.html](http://www.chiroweb.com/archives/23/03/08.html).

### *Reference:*

Apkarian AV, Sosa Y, Sonty S, et al. Chronic back pain is associated with decreased prefrontal and thalamic gray matter density. *The Journal of Neuroscience*, Nov. 17, 2004 24(46):10410-10475.

For more information on back pain, go to <http://www.chiroweb.com/find/tellmeabout/backpain.html>

Page printed from:

[http://www.toyourhealth.com/mpacms/tyh/article.php?id=337&no\\_paginate=true&no\\_b=true](http://www.toyourhealth.com/mpacms/tyh/article.php?id=337&no_paginate=true&no_b=true)