Persons suffering chronic back pain were reported to have as much as an 11 percent shrinkage in their brain size. The loss appears to be in grey matter, which is important for cognitive function and memory. Vania Akparian said the assumption had been the brain reverted to normal after the pain stopped. The researchers from Northwestern University, Chicago, claim 1.3 cubic centimeters of grey matter is lost for every year of chronic pain. Such loss is equivalent to 10-20 years of normal aging. Whether recovery is possible is not known.

If this study is validated, it means chronic back pain is a serious factor in aging, and even more intensive measures to combat the pain will be required. Pain relief may be more important than previously believed. The implications of this study may require a re-thinking of many traditional attitudes to pain relieving strategies, including the use of pain medications. It may not be good to suffer in silence.