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NON-SURGICAL VERTEBROPLASTY HELPS PEOPLE LIVE PAIN-FREE AFTER SPINAL FRACTURE

AT A GLANCE

- ? People who are in pain after suffering a vertebral fracture shouldn't wait to seek help: treatment delay may lead to loss of height and spine curvature.
- ? Vertebroplasty, a minimally invasive procedure, is effective for more than 9 out of 10 patients, and the pain-relief is long-lasting, according to research.
- ? Osteoporosis, or weakened bone, causes 700,000 vertebral fractures every year.
- ? More than 10 million Americans suffer from osteoporosis, and another 18 million are at risk.

BALTIMORE – People who suffer persistent pain in their spine for three months or more, and those who must take narcotic pain relievers for their pain may be suffering from potentially deforming spinal fractures, which can often be treated with a non-surgical procedure. Vertebroplasty, a procedure performed by interventional radiologists that stabilizes the fractured bone, is providing long-lasting pain relief and may even prevent further damage if performed early, according to research being presented here today at the

27th Annual Scientific Meeting of the Society of Cardiovascular & Interventional Radiology (SCVIR). The spinal fractures are a result of osteoporosis, a common condition among people over age 50.

“Even a simple fall can lead to a crushed vertebra in the spine in someone with osteoporosis,” said J. Kevin McGraw, M.D., co-director of vascular and interventional

radiology at Riverside Methodist Hospital, Columbus, Ohio. “If the vertebra isn’t solidified, it can continue to flatten out, which can lead to loss of height and curvature of the spine. Once the vertebra flattens out, we can no longer treat the compression effectively. It is very important for someone with persistent pain in their spine lasting more than three months to seek help, and people who require constant narcotic pain relief should be treated immediately.”

More than 10 million people in the United States – 80 percent of them women – suffer from osteoporosis, or weakened, porous bone, according to the National Osteoporosis Foundation. Another 18 million Americans are estimated to have low bone mass, placing them at increased risk for osteoporosis. Osteoporosis causes 700,000 vertebral fractures every year.

In the study, 100 patients ages 37 to 94, underwent vertebroplasty to treat vertebrae that had fractured, 94 due to osteoporosis, 5 due to cancer and 1 due to congenitally weakened bone. After an average follow-up of more than 21 months, 92 patients (93 percent) reported significant improvements in back pain. All but one patient completed a Visual Analog Scale (VAS) questionnaire, used to quantify the level of back pain both before and after the procedure. In the VAS, 0 represents no pain and 10 represents the most severe pain a person has ever had. Before vertebroplasty, the average score among the 99 patients was 8.91. After follow-up, the pain averaged 2.02: 16 patients said they had no pain at all after the procedure, and 77 patients ranked their pain as 2 or less.

Osteoporosis can weaken bone, which can fracture in a fall, or even during a simple activity such as getting out of bed. A crushed vertebra can continue to collapse

six months to a year after the fracture occurs. This can cause constant pain and lead to loss of height and curvature of the spine, known as “dowager’s hump.”

In vertebroplasty, an interventional radiologist inserts a cocktail-sized straw through a nick in the skin in the back, directly into the center of the fractured vertebra. Using X-ray guidance to follow the procedure, the physician injects medical-grade bone cement into the vertebra. The cement hardens within about 15 minutes and stabilizes the fracture, which stops the pain and prevents further collapse of the vertebra. The procedure is performed while the patient is lightly sedated.

“Our study shows that not only is vertebroplasty incredibly effective, but it continues to provide pain relief for years,” said Dr. McGraw. “Before treatment, many of these patients are in agony and can’t function routinely, and there’s very little else to offer them besides bed rest and pain killers. Vertebroplasty can give them their lives back.”

Co-authors of a study on the topic being presented by Dr. McGraw are K.D. Minkus, J.A. Lippert, P.M. Rami, J.M. Boorstein and J.S. Silber.

An estimated 5,200 people are attending the SCVIR Annual Scientific Meeting in Baltimore. SCVIR is the professional society of interventional radiologists – physicians who specialize in minimally invasive, targeted treatments performed using imaging guidance. Interventional radiology procedures are an advance in medicine that replace open surgical procedures. They are generally easier for the patient because they involve no large incisions, less risk, less pain and shorter recovery times. To find out more information about interventional radiology procedures or to find an interventional radiologist, visit the SCVIR Web site, www.scvir.org.

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