

## Catastrophizing Worsens Osteoarthritis Disability

BY DAMIAN McNAMARA  
Miami Bureau

FORT LAUDERDALE, FLA. — Pain catastrophizing and pain-related fear are associated with increased disability and worse physical functioning among overweight patients with osteoarthritis, according to a study presented at the World Congress on Osteoarthritis.

"In the cognitive-behavioral area, what people are thinking about pain while they are having it can have a significant effect," said Francis J. Keefe, Ph.D. "We need to be thinking about pain-related cognitions. These can increase the patient perception of pain."

Researchers assessed pain among 106 patients with knee osteoarthritis. They also evaluated psychological disability, physical impairment, and walking velocity while controlling for pain levels. They measured walking velocity, stride length, and knee range of motion. Mean body mass index was 35 kg/m<sup>2</sup>, mean age was 58 years, and 77% were women. The mean Kellgren-Lawrence Scale score was 2.79.

Dr. Keefe and his associates sought to assess how pain catastrophizing and pain-related fear might affect psychological and physical functioning in this patient population. It already is well accepted that increased body weight can increase severity of knee osteoarthritis, he said.

People who catastrophize focus on their pain and magnify it. They can misinterpret pain as more threatening than it is and underestimate their ability to manage it. "Pain catastrophizing tends to increase the pain experience and disability. The reason people do this is it tends to pull other people into their situation," said Dr. Keefe, who is with the medical psychology division, psychiatry and behavioral sciences de-

partment, Duke University, Durham, N.C.

Pain-related fear includes excessive fear of experiencing pain during movement, or kinesiophobia. This phenomenon "is especially important in the obese with osteoarthritis if they are afraid to move," Dr. Keefe said at the meeting, which was sponsored by Osteoarthritis Research Society International.

"Clinicians need to be aware of the effects of pain catastrophizing," he said.

All participants completed the Coping Strategies Questionnaire to assess pain catastrophizing, the Tampa Scale for Kinesiophobia to measure pain-related fear, and the Arthritis Self-Efficacy Scale. Self-efficacy for pain management was associated with improved physical functioning in the study.

Catastrophizing and pain-related fear were associated with higher psychological distress and lower pain self-efficacy. Pain-related fear, but not catastrophizing, was associated with worse physical functioning.

"Pain cognition, even after controlling for demographics and medical severity, does contribute significantly to pain," Dr. Keefe said. "The degree of catastrophizing was among the greatest we've seen. We've also studied this in oncology."

Addressing pain catastrophizing among overweight people with knee osteoarthritis might improve psychological functioning, Dr. Keefe said. An intervention aimed at improving pain-related fear could improve physical functioning as well. "Coping skills training or cognitive-behavioral therapy could improve these cognitions, but they are challenging to do."

Dr. Keefe and his associates plan to launch a new study that will randomize obese patients with osteoarthritis to behavioral weight management, pain coping skills training, both interventions, or control group. ■

## When Other Opioids Fail, Consider Levorphanol for Refractory Pain

TAMPA — Levorphanol appears to be an attractive option for the treatment of refractory pain that does not respond to other opioids, based on a case series of 31 patients presented at the annual meeting of the American Academy of Hospice and Palliative Medicine and the Hospice and Palliative Nurses Association.

Dr. John P. McNulty of the Palliative Care Institute of Southeast Louisiana presented a case series of 20 of 244 patients with chronic, nonmalignant pain from a palliative care clinic and 11 of 1,508 terminally ill patients with severe chronic pain enrolled in hospice care during a 5-year period. These patients were treated with levorphanol when pain did not respond adequately to other opioids, including methadone. Roughly half of the patients reported excellent relief (52%). Another 22% reported fair pain control, yielding a response rate of 74%.

Levorphanol has been reported to pro-

vide analgesia at doses that suggest it does not act like other pure agonist opioids. It has been proposed that levorphanol acts on both opioid receptors and N-methyl-D-aspartate (NMDA) receptors, which might account for this effect.

The drug has a number of advantages. It acts on mu, kappa, and delta opioid receptors and is an NMDA receptor antagonist. The drug relieves neuropathic pain, has a long half-life, and can be administered every 6-8 hours.

Levorphanol's disadvantages include the lack of a parenteral formulation. It is not actively marketed, so many physicians are not aware that it is available. "I would suggest, based on this, that if methadone works then levorphanol might be an option," Dr. McNulty said. "We are using it for our hospice patients as a second-line drug."

Dr. McNulty disclosed that he had no relevant financial relationships.

—Kerri Wachter

## Smoking May Increase Risk of Developing Neuropathic Pain

BY FRAN LOWRY  
Orlando Bureau

ORLANDO — In a community sample of 205 adults with chronic pain of any type, neuropathic pain was documented in almost two-thirds of those who smoked, compared with one-third of those who did not smoke, Dr. Todd G. Call reported at the annual meeting of the American Academy of Pain Medicine.

"The results were a little bit of a surprise to us, but it appears that smoking seems to confer a greater risk of neuropathic pain. We're not quite sure why that is. It's too early to say. The study really wasn't designed to look at that, but it's worth looking into further," Dr. Call of the Mayo Medical School, Rochester, Minn., said in an interview.

Dr. Call and his colleagues sought to validate a method of screening for neuropathic pain in adults with chronic pain living in the community.

They identified a subset of adults with self-reported nerve pain, and confirmed the diagnosis according to scores on the self-reported Leeds Assessment of Neuropathic Symptoms and Signs pain scale and select ICD-9-CM codes associated with neuropathic pain on chart review.

Neuropathic pain was confirmed in 75 of the 205 patients. The remaining 130 patients had chronic, nociceptive pain.

Overall, 13% of the participants smoked, but among patients in the neuropathic pain subset, 21% were smokers.

In another study from the Mayo Clinic, Dr. Susan Moeschler reported that female smokers attending the clinic's pain center had higher pain intensity scores than female nonsmokers and smoking and nonsmoking males.

Compared with 131 female nonsmokers, the 14 female smokers were more likely to be unemployed and less likely to have completed high school. Smokers also reported greater pain intensity, which was more likely to interfere with their mood, personal relationships, sleep, and enjoyment of life. Among the 85 men in the study, 22 of whom were smokers, smoking status was not related to any demographic, pain intensity, or mood interference differences.

"These findings suggest that female smokers with painful conditions have greater affective distress than other male smokers and other subsets of patients," Dr. Moeschler said.

Dr. Call's study was supported by an unrestricted grant from AstraZeneca Pharmaceuticals LP and the U.S. National Institutes of Health. Dr. Call said he had no financial conflicts of interest.

Dr. Moeschler's study was supported by the Mayo Clinic's department of anesthesia institutional funds. ■

## Lamotrigine May Improve Pelvic Pain, Depression

BY KERRI WACHTER  
Senior Writer

BALTIMORE — The anticonvulsant lamotrigine shows promise for reducing pain and improving mood symptoms associated with chronic pelvic pain, particularly in women with the vulvovaginal subtype.

In a study of 43 women with chronic pelvic pain, researchers at the University of North Carolina found that treatment with lamotrigine resulted in significant reductions in total pain, overall pain intensity, and depressive symptoms at 8 weeks, compared with baseline.

There were slightly greater reductions in those measures at 12 weeks that achieved significance. The study, which was presented as a poster at the annual meeting of the American Psychosomatic Society, was funded by GlaxoSmithKline Inc., maker of Lamictal (lamotrigine).

Dr. Samantha Meltzer-Brody of the department of psychiatry at the University of North Carolina, Chapel Hill, and her colleagues recruited women from a tertiary care clinic. Participants had to have pelvic pain for at least 6 months. Women were excluded if they had active systemic disease or substance abuse, pelvic surgery in the previous 6 months, or initiation/change in psychi-

atric medications in the previous month.

After baseline assessments, the women were titrated up to a therapeutic dosage of 400 mg/day lamotrigine over 8 weeks. This dosage was continued for weeks 8-12. Patients then were slowly discontinued from the drug over a 2-week period. A total of 31 women completed the 8-week titration phase and 21 completed all 12 weeks of treatment.

The women completing 8 weeks of treatment were aged 41 years on average and were predominantly white (95%). The average dosage in that period was 340 mg/day. Most of the women had the vulvodynia/vulvar vestibulitis syndrome subtype (17). The remaining women were evenly split between diffuse abdominal pain (7) and neuropathic pain (7).

The researchers also analyzed the data by chronic pelvic pain subtype. Those with the vulvovaginal pain (VVS) subtype had significant reductions in McGill total pain and visual analog scale overall pain intensity scores at weeks 8 and 12. They also had a significant reduction in Hamilton Depression Rating Scale scores at 12 weeks. However, the investigators noted in the poster that "VVS patients have better mental health and decreased rates of sexual and/or physical abuse history compared to women with other chronic pelvic pain subtypes." ■