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## Catastrophizing Complicates Chronic Pain Tx

## Helping patients shift their focus from fighting to accepting their pain is particularly tricky.

BY KATE JOHNSON

EXPERT ANALYSIS FROM THE WORLD CONGRESS ON PAIN

MONTREAL – Personality and attitude play a major role in shaping a patient's experience of chronic pain, and understanding this dynamic may help physicians overcome obstacles in treating some of their unresponsive patients, according to Michael Sullivan, Ph.D.

In fact, in recent studies, catastrophizing has emerged as "the most powerful psychological predictor of problematic pain outcomes," said Dr. Sullivan, professor of psychology, medicine, and neurology at McGill University in Montreal.

In the context of pain, catastrophizing is defined as the tendency to worry and focus on the pain. Individuals who score high on the Pain Catastrophizing Scale (PCS), which was developed by Dr. Sullivan in 1995, tend to magnify and ruminate over their symptoms while feeling helpless about addressing them. "These individuals have an excessively alarmist attitude towards their pain and seem to have a lot more difficulty dealing with it," he said at the meeting.

In the office setting, chronic pain patients who catastrophize "display more pain behavior such as holding, rubbing, guarding, as well as vocalizations such as moans and sighs," he said at the

meeting, which was sponsored by the International Association for the Study of Pain.

"Research shows that not only are catastrophizers going to have more difficulty in pain situations, they are also going to respond less well to the interventions that we offer them," he said. In studies, Dr. Sullivan and his colleagues have shown that, compared with non-catastrophizers, catastrophizers are at greater risk of chronic pain following knee arthroplasty (Pain Res. Manag. 2008;13:335-41) and have more difficulty returning to work after whiplash injuries (J. Occup. Rehabil. 2007;17:305-15).

For patients whose chronic pain stems from an accident, perceptions of injustice also are common and can be expressed as anger or noncompliance. "Some of our recent research [Pain 2009;145:325-31] shows that perceptions of injustice are often associated with prolonged disability following a pain-related injury," he said. For the treating physician, "validation techniques can be useful in reducing the negative impact of the catastrophizing patient's perceptions of injustice."

By identifying catastrophizers early, physicians can avoid pitfalls that contribute to treatment failure in chronic pain. "There are some very concrete ways in which physicians could be reacting differently with these patients" to

make patient management easier, he pointed out.

First and foremost, catastrophizers need to express their suffering and anxiety. "This person does have a story to tell and they need someone to listen. By not listening properly to that story initially, you are going to hear it again every time the patient comes, because the patient is going to feel that the doctor doesn't understand. So, increasing the time you initially spend with the patient can save a lot of headaches further down the line," Dr. Sullivan explained.

Active listening has even been shown to reduce a patient's perception of pain, at least in the context of acute symptoms, said Dr. Sullivan, who has published several studies showing that allowing catastrophizers to disclose their fear and worry prior to routine dental hygiene procedures can reduce their perception of pain by as much as 50% (J. Indiana Dent. Assoc. 2000-2001;79:16-9; and Pain 1999;79:155-63).

Although a patient's basic personality is a challenge for physicians to work around, attitude – which is also an extremely powerful modifier of pain – is somewhat easier to mold, suggested Stefaan Van Damme, Ph.D., of the department of experimental clinical health and psychology at Ghent (Belgium) University.

In approaching pain control as a goal, chronic pain patients fall into two distinct categories: those who try to overcome it (assimilators) and those who accept it (accommodators). Both attitudes can be

helpful or harmful, depending on how realistic pain control is for a particular patient, he said at the meeting.

"When pain is controllable, assimilative coping works. But when it is not controllable it can be maladaptive because it can exacerbate catastrophizing, hypervigilance, and distress," he said. In a study, he demonstrated that, when attempts to avoid pain are unsuccessful, "individuals persist in their avoidance attempts, try harder, and narrow their focus of attention upon the problem to be solved" (Pain 2008;137:631-9).

Helping patients shift their focus from fighting to accepting their pain is particularly tricky for physicians, commented Dr. Sullivan, who is a psychologist. "I only get sent the patients when their pain has been long-standing. The concept of acceptance works when the pain has been there for 5 years," he explained, "but for new-onset pain, acceptance is not the message that should be given by the doctor. This should only come up after we've offered everything else we can offer."

Physicians should also be aware of their own personal psychology when dealing with catastrophizing patients, because catastrophizing personalities are not confined to the patient world. Physicians who are catastrophizers may inadvertently increase a patient's perception of suffering. "Some of our research suggests that if you're a catastrophizer you see 30% more pain in these individuals," he said.

The speakers did not declare any conflicts of interest.

## Yoga May Ease Pain Symptoms in Women With Fibromyalgia

BY HEIDI SPLETE

FROM PAIN

Women with fibromyalgia who participated in an 8-week yoga program reported significant improvements on measures of fibromyalgia symptoms and function, based on data from a pilot study of 53 women.

The positive findings have become the basis of a grant proposal to the National Institutes of Health to fund a larger clinical trial, said lead investigator James Carson, Ph.D.

Many fibromyalgia patients find standard medical care ineffective for reducing their symptoms, including pain and fatigue, Dr. Carson of Oregon Health and Science University, Portland, said in an interview.

More effective treatments for fibromyalgia are needed, said Dr. Carson. "Exercise is often prescribed for fibromyalgia, but for many patients it is hard to find an exercise program that is tolerable for them. Yoga poses done in a gentle way may be a good option," he said.

Dr. Carson and colleagues randomized 53 women who met the American College of Rheumatology criteria for fibromyalgia in an 8-week Yoga of Awareness program (25 women) or standard care (28 women). The program consisted of gentle yoga poses, modified as needed to accommodate conditions such as knee osteoarthritis or carpal tunnel syndrome (Pain 2010;151:530-9).

The primary outcome measure was the total score on the Fibromyalgia Impact Questionnaire Revised (FIQR). After 8 weeks, the mean FIQR total score dropped from 48.32 at baseline to 35.49 in the yoga

group (a statistically significant difference), compared with a change from 49.26 at baseline to 48.69 in the control group. More than half (56%) of the yoga group had at least a 30% reduction in overall FIQR scores, which is slightly more than twice the 14% reduction that is rec-

ommended to show clinical significance, the researchers noted. In addition, 50% of patients in the yoga group had at least a 30% reduction in the pain subscale of the FIQR.

The Patient Global Impression of Change (PGIC) scale scores for overall improvement in fibromyalgia symptoms were significantly higher in the yoga group vs. the control group (5.05 vs. 3.69). The PGIC was measured only once, at the end of the study. As part of the PGIC, approximately 90% of the patients in the yoga group reported feeling "a little better," "much better," or "very much better," compared with 19% of the controls.

The average age of the participants was 54 years, and 68% had been symptomatic for more than 10 years. Patients who were already engaged in a yoga practice, those who were too disabled for meaningful participation in the yoga program, and those who were scheduled for elective surgery were excluded from the study.

"The most surprising finding for us was that most pa-

tients became so fully engaged in the home yoga practices they were assigned," Dr. Carson said. On average, the patients spent 40 minutes practicing yoga at home, including about 19 minutes of postures, 13 minutes of seated meditation, and 8 minutes of breathing exercis-

es. Those who practiced more had better results on several of the study outcomes, he noted.

"This finding suggests that yoga practices, if taught in a tailored, accessible manner, are not only well tolerated and effective; they are practiced with an unexpected degree of enthusiasm," he said.

The results also showed that patients in the yoga group were more likely to use positive pain-management strategies such as problem solving, religion, acceptance, and relaxation, and less likely to resort to negative pain-management strategies such as self-isolation, disengagement, and catastrophizing.

"We are preparing a grant proposal to the National Institutes of

Health to fund a larger clinical trial that will include comparison with another active treatment, so that we can make sure that the improvements seen in this first study can be reliably replicated in another group of patients, and that the improvements are not attributable to simply receiving extra attention from caregivers or to a placebo effect," Dr. Carson said.

The researchers had no conflicts to disclose.



On average, the patients spent 13 minutes on seated meditation.