OA Patients' End-of-Day Pain Recall Reliable

Characteristics such as age, gender, race, joint site had no significant interactions with accuracy.

BY ROBERT FINN

Patients with osteoarthritis who are asked just before bedtime to estimate their average pain during the day are able to produce accurate estimates, meaning that clinicians can rely on these end-of-day estimates without having to worry that the patient's recall may be biased.

These findings differ from those in other studies that have suggested that end-of-day recall might be affected by more recent pain readings, by whether it was a weekday or a weekend, or by other patient characteristics.

The patients in the current study all had osteoarthritis (OA) of the hand, hip, or knee. Their mean age was 62 years, and women accounted for 52% of the study cohort, wrote by Kelli D. Allen, Ph.D., and colleagues at Duke University, Durham, N.C. (J. Pain 2009 Jan. 22 [doi:10.1016/j.jpain.2009.09.007]).

They were each given a handheld computer that reminded them approximately every 2 hours to record their current level of pain on a visual-analog scale. At the end of the day, the computer also prompted the patients to estimate their average pain over the entire day. Each patient recorded pain estimates on 2 days, once on a weekday and once on a weekend day.

On average, pain scores recorded throughout the day on the 1-100 visual-analog scale were 35 on weekdays and 33 on weekends.

Patients' average end-of-day recalled pain scores were 37 on weekdays and 34 on weekends. None of the differences were statistically significant.

The overall correlation coefficient between end-of-day estimates and the average of the seven estimates during the day was 0.88 on weekdays and 0.86 on weekend days, indicating a high—and statistically significant—degree of correlation.

The investigators were able to eliminate the possibility that the patients may have been biased by their most recent pain reading when recalling their average pain. They did this by calculating the patient's average pain after deleting the final reading of the day and repeating the correlation analysis. If that reading affected the patient's recall significantly, the investigators would have seen a substantial change in the correlation coefficients. In fact, the correlation coefficients were almost identical—0.87 on weekdays and 0.85 on weekends.

In addition, the investigators found that none of the patient characteristics they tested had a significant correlation with the accuracy of the end-of-day estimates. In particular, they found that age, gender, race, joint site, and the tendency of the patient to catastrophize pain (measured by the Coping Strategies Questionnaire) had no significant interactions with accuracy.

The investigators acknowledged that pain recall over a 1-week period may be less accurate than 1-day recall. And they pointed out that they demonstrated the accuracy of patient recall only for the chronic pain of OA, which may account for the far lower degree of recall accuracy than other investigators saw in a study of acute pain in postsurgical patients. ■

VITALS

Major Finding: A single end-of-day pain score correlated with multiple pain scores measured during the day by a coefficient of 0.88 on weekdays and 0.86 on weekend days.

Data Source: Visual analog scale scores recorded on weekdays and weekend days by 157 patients with osteoarthritis.

Disclosures: Study supported by American College of Rheumatology Research and Education Foundation. The investigators reported no other conflicts of interest.

Idiopathic Abdominal Pain in Children May Be Migraine

BY MIRIAM E. TUCKER

NATIONAL HARBOR, MD. — Abdominal migraine might be responsible for up to 15% of all cases of idiopathic recurrent abdominal pain in children, according to an analysis of records from more than 400 children.

Abdominal migraine is an idiopathic disorder that is characterized by moderate to severe midline abdominal pain lasting 1-72 hours associated with vasomotor symptoms, nausea, and vomiting. It is recognized by the International Headache Society (IHS) as being among the "periodic syndromes of childhood that are commonly precursors of migraine" (Cephalagia 2004;24:suppl 1:9-160).

Most of the literature on the topic is from Europe, and the diagnosis is far more common there than it is in the United States, where it is largely underdiagnosed, Dr. Laura D. Carson and her associates reported in a poster she presented at the annual meeting of the North American Society of Pediatric Gastroenterology, Hepatology, and Nutrition.

In a retrospective chart study of 600 children and young adults (ages 1-21 years, 59% female) who were referred to a pediatric gastroenterologist during 2006-2007 for recurrent abdominal pain, 23.5% (141) were excluded because of a preexisting diagnosis.

Of 458 children who met inclusion criteria, 4% (20) met the IHS diagnostic criteria for abdominal migraine, while another 11% (50) were considered probable diagnoses of abdominal migraine with documentation lacking for at least one diagnostic criterion. The remaining 85% (388) did not meet the criteria, said Dr. Carson and her associates, of Eastern Virginia Medical School and Children's Hospital of the King's Daughters, both in Norfolk, Va.

In an interview, Dr. Carson said no significant relationship was identified among those with abdominal migraine and those who had family histories of either abdominal pain or headache. However, children who met the abdominal migraine criteria were four times more likely to have migraine headache themselves.

Despite its inclusion in both the IHS classification as well as inclusion in the 2006 Rome III GI Criteria (Gastroenterology 2006;130:1527-37), abdominal migraine is infrequently considered in the differential diagnosis of recurrent abdominal pain in children. Part of the problem is that expertise in migraine lies with neurologists, who are rarely called upon to evaluate abdominal pain.

Abdominal migraine occurs only in children, whereas in adulthood it presents to neurologists as classic migraine headache. Children with recurrent abdominal pain often are referred to gastroenterologists, who rule out other organic causes but might not consider migraine as an etiology.

"Given the spectrum of treatment modalities now available for pediatric migraine, increased awareness of cardinal features of abdominal migraine by pediatricians and pediatric gastroenterologists may result in improved diagnostic accuracy and early institution of both acute and preventative migraine-specific treatments," Dr. Carson and her associates said in their poster.

This study was funded by the Children's Specialty Group Chairman's Fund, based at Children's Hospital of the King's Daughters, Norfolk. Dr. Carson stated that she had no other financial disclosures. ■

Isocarboxazid Appears to Reduce Migraine Frequency

BY MICHELE G. SULLIVAN

PHILADELPHIA — The monoamine oxidase inhibitor isocarboxazid may be an effective migraine preventive as well, Dr. Bruce Corser reported in a poster presented at the International Headache Congress.

Although the open-label trial was small, with just 14 patients, all of those who completed it showed a significant decrease in migraine frequency over 20 weeks, said Dr. Corser, the medical director of Community Research, Cincinnati.

Isocarboxazid is approved for the treatment of depression. "The efficacy of antidepressants and other serotonin-modulating drugs in the treatment of migraine has suggested that monoaminergic pathways are involved in the etiology of migraine," Dr. Corser wrote. "In addition, a recent study has identified an association between genetic polymorphisms of MAO-A and migraine."

Dr. Corser and his colleagues included 14 patients (mean age 44 years) who had a diagnosis of migraine and a history of 3-12 migraine headaches per month for the 3 months preceding recruitment. The patients were not allowed concomitant use of antidepressants or other common anti-migraine drugs.

Isocarboxazid was started at 20 mg/day and increased as needed and tolerated to a maximum of 60 mg/day. Most of the patients tolerated a maximum dose of 20-40 mg/day.

However, adverse effects were common and caused five patients to discontinue the trial—one each for insomnia, irritability/anxiety, mood swings/fatigue, anorgasmia, and fatigue. Three other patients reported adverse events as well (fatigue, insomnia, and nosebleed), but they completed the trial.

A total of seven patients completed the final follow-up.

At baseline, patients reported an average of five migraines a month. By week 8, there was a significant reduction in frequency. By week 20, the average frequency per month was less than one.

All of the patients who completed the trial were considered responders by week 16—that is, they experienced at least a 50% decrease in migraine frequency, Dr. Corser and his colleagues reported at the meeting, which was sponsored by the International Headache Society and the American Headache Society.

"In this trial, isocarboxazid showed very robust clinical efficacy in the prophylactic treatment of migraine attack," Dr. Corser wrote.

In addition to affecting monoaminergic neurotransmission, the drug's effect on blood pressure and vascular tone might add to its benefit in migraine, he added.

The trial was funded by Validus Pharmaceuticals of Parsippany, N.J., and Oxford Pharmaceutical Services of West Totowa, N.J. ■