Postinjury Headaches Persist in TBI Patients

Most patients in the study had migraine with or without aura, or tension-type headache.

BY SHERRY BOSCHERT

FROM THE ANNUAL MEETING OF THE AMERICAN HEADACHE SOCIETY

LOS ANGELES — Nearly half of 377 patients with traumatic brain injury reported postinjury headaches that persisted during a year of follow-up in a prospective study.

The prevalence of headaches in the cohort increased from 18% before the injury to 46% soon after injury, according to patient reports during rehabilitation hospitalization for traumatic brain injury (TBI).

Preinjury headache may be a risk factor for posttraumatic headache, especially among women.

DR. LUCAS

In phone interviews after discharge at 3, 6, and 12 months post injury, headaches were reported by 48%, 44% and 46%, respectively.

The persistence of the headaches took senior investigator Dr. Sylvia Lucas and her colleagues by surprise, because previous data have suggested that 18%-22% of posttraumatic headaches are chronic problems.

Dr. Lucas said that she and her associates also were surprised that most of the headaches in the current study were classified as migraine or tension-type headache.

They were also surprised to find that the presence of preinjury headache seemed to be a risk factor for postinjury headache, and that women were at higher risk for postinjury headache.

The findings on types of headache and their persistence could have "important implications for treatment" of posttraumatic headache, said Dr. Lucas, founder and director of the headache center at the University of Washington, Seattle.

Posttraumatic headache is one of the most common persisting symptoms after TBI, occurring in 30%-90% of patients, previous studies suggest. Although most familiar as a salient symptom in soldiers who were exposed to explosive blasts, "it's becoming of great interest in adolescent children who've been in sports concussion injuries," she said.

The study included consecutive admissions of patients older than 16 years at seven acute rehabilitation facilities for TBI, excluding 79 patients who could not provide consent or answer questions themselves without their families' acting as proxy.

The cause of injury was vehicular trauma in approximately 56%, falls or impacts with flying objects in 28%, violence in 9%, and sports or pedestrian accidents in 4% each. (Percentages were rounded.)

Based on descriptions of symptoms by patients who reported headache, 60% of preinjury headaches were classified as migraine or probable migraine, compared with 48% soon after injury and 54% a year later.

Although 25% of preinjury headaches and 37% of headaches soon after injury were deemed "unclassifiable" by investigators using patients' descriptions, over time they gained features that allowed them to be classified in one of the primary headache classifications, so that the proportion of "unclassified" headache fell to 19% by 12 months post injury.

"Mostly, patients were classified as migraine with or without aura, or tension-type headache, which is also surprising given the fact that most of these were vehicular injuries," she said.

"There was not a high prevalence of cervicogenic headache," Dr. Lucas added.

Headaches were classified as tension-type in 12% before injury, in 7% soon after injury, and in 19% at 12 months. Headaches were classified as cervicogenic in 4% before injury, in 8% soon after injury, and in 5% at 12 months.

Among patients who said they suffered headaches before the injury, 48% reported postinjury headache, compared with 23% of patients who said they did not have headaches before the injury.

"Preinjury headache may be a risk factor for posttraumatic headache. This may argue for a common underlying mechanism," Dr. Lucas said.

The cohort was 71% male and 75% white. Patients were average age 43 years, and 84% of patients were able to be discharged to home.

The injury caused posttraumatic amnesia for less than a day in 7% (indicative of a milder head injury), for 1-7 days in 21%, for 8-28 days in 42%, and for 29 or more days in 30%.

"This was primarily a male group; however, all the way along—at baseline, 3 months, 6 months, and 12 months—there was a statistically significant difference in women having more posttraumatic headache than men," as well as a higher incidence of preinjury headache, Dr. Lucas said at the meeting.

About 40% of men reported headache at all follow-up time points after injury, compared with approximately 60% of women.

A physician in the audience asked if there was any relationship between insurance claims and reports that the headaches were persisting. "That's a good question, but at the time of our study, that information was not available," she responded. ■

VITALS

Major Finding: Headaches, initially reported by 46% of patients soon after injury, still occurred in 48% at 3 months, 44% at 6 months, and 46% at 12 months.

Data Source: Prospective study of 377 consecutive admissions to acute rehabilitation facilities for traumatic brain injury.

Disclosures: Dr. Lucas said she has no relevant conflicts of interest. The National Institute on Disability and Rehabilitation Research funded the study.

Variable Effects Reported for Cannabis in Cluster

BY SHERRY BOSCHERT

FROM THE ANNUAL MEETING OF THE AMERICAN HEADACHE SOCIETY

LOS ANGELES — Marijuana use was more common among 139 French patients with cluster headaches than among the general population, but their reports of the effect of the drug on headaches were variable and uncertain.

Dr. Elizabeth Leroux and her associates surveyed 115 male and 24 female patients presenting with cluster headaches at the Emergency Headache Center in Paris and the Headache Clinic in Marseille, France.

On questionnaires, 45% of the patients described themselves as cannabis (marijuana) users, which the investigators defined as any repeated use of cannabis except for isolated trials during their teenage years.

In the previous 6 months, a total of 32% of the patients had used cannabis.

Those rates were significantly higher than the rates of use among the general French population, Dr. Leroux of Lariboisière Hospital, Paris, reported in a poster presentation at the meeting.

Previous data from other investigators suggest that 12% of men and 5% of women in France had used cannabis in 2006.

Clinicians should address substance use when caring for patients with cluster headaches, in order to prevent complications from drug use and potential interactions with prescription medications, Dr. Leroux advised.

Clinicians should address substance use in patients with cluster headaches, in order to prevent complications from drug use and potential interactions with prescription medications.

The 63 cannabis users in the current study were more likely to be young men and tobacco smokers than were the 73 headache patients who didn't use cannabis. (Three other patients who had once used cannabis to try to treat a cluster headache attack did not describe themselves as users and were excluded from some analyses.)

The mean age was 36 years for cannabis users and 45 years for nonusers. Males made up 59 of the 63 cannabis users and 54 of the 73 nonusers. Among the cannabis users, a total of 58 (92%) reported that they smoke tobacco, compared with 43 (60%) of the nonusers.

The effects of cannabis on cluster headaches were no clearer than a smoke-filled room, with 27% of patients saying that they think cannabis could provoke a cluster headache attack, 59% saying they do not think so, and no response from the rest.

Four patients (3% of the cohort) said they believe that cannabis could either provoke or abort cluster headache attacks.

Among the 63 cannabis users, 27 (43%) said they avoid cannabis during an attack of cluster headaches, 24 patients (38%) said they do not avoid cannabis during attack periods, and 12 patients (19%) didn't answer the question.

A total of 27 patients had tried cannabis specifically to treat their cluster headache attacks, and 20 of them had tried this more than twice.

Their reports of the effect of cannabis on headaches were variable as well.

One patient (3%) said that cannabis was "very efficient" in treating cluster headache, 6 patients (22%) said cannabis gave them more than 50% relief from headache pain, 6 patients (22%) said cannabis was not helpful or made the headache worse, and 14 patients (53%) said the drug's effects on cluster headache were "variable or uncertain."

The study provides some of the first data on cannabis use in this population.

Cannabis contains the compound delta-9-tetrahydrocannabinol, an agonist of cannabinoid receptors, which have antinociceptive properties and effects on cerebral arteries, the investigators noted. ■

Disclosures: *The investigators reported having no pertinent conflicts of interest.*