

# Disability in Chronic Migraine Is Age Related

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PHILADELPHIA — Chronic migraine is a much more disabling disorder than episodic migraine, causing patients to miss more than five times as many days of work, school, or household activity, according to a new subanalysis of the American Migraine Prevalence and Prevention Study.

The gap between the two disorders in missed or impaired work time is largest in young adulthood, during a person's typically most productive years, Dawn C. Buse, Ph.D., and her colleagues wrote in a poster presented at the International Headache Congress.

"Chronic migraine is a remarkably disabling disease when compared with episodic migraine in terms of lost productive time or reduced effectiveness at work, school, or home," wrote Dr. Buse, director of psychology at the Montefiore Headache Center, New York.

"This marked difference may be even greater between chronic and episodic migraine, as our model may underestimate the impact due to the number of respondents who are occupationally disabled," she said.

The American Migraine Prevalence and Prevention Study (AMPP) defined chronic migraine as a diagnosis of migraine with at least 15 headache days a month.

Episodic migraine was a diagnosis of migraine with 0-14 headache days a month. The assessment tool used in this subanalysis was the Migraine Disability Assessment (MIDAS) questionnaire. Days of school, work, or housework with disability were assessed by adding missed days and days when effectiveness at those venues was reduced by at least 50%. All of the numbers of missed or disabled days were estimated from a statistical model based on data from the AMPP study.

In the cohort, 11,249 participants had episodic migraine and 655 had chronic migraine.

Occupational disability was reported

by 903 subjects, including 820 (7%) with episodic migraine and 83 (13%) with chronic migraine.

The number of impaired or missed work days declined with age: at 34, the average was closer to 14 days during the preceding 3 months; 12 days at age 44; and 10 days at age 54. By age 74, respondents with chronic migraine were predicted to experience an average of 6 missed or impaired work days per 3 months.

Those with episodic migraine reported many fewer missed or impaired days, without much age-related variation. At age 24, subjects were predicted to experience an average of 4 missed or disabled work or school days in the preceding 3 months. This lessened to about 2 days by age 54 and 1 by age 64.

Subjects with chronic migraine who reported household work disability days

fared considerably worse. At age 24, estimates predicted an average of 43 days over the preceding 3 months when they could not perform household work or could perform only 50% or less of it. This also declined with age, but not as sharply as work/school disability days.

By age 54, the statistical models predicted an average of 35 days during the preceding 3 months when they could not perform their household chores or could do only 50% or less. By age 74, the disability days had lessened to about 30 in the preceding 3 months.

Again, the estimated number of missed or disabled housework days were lower for those with episodic migraine, with little age-related variation. At age 24, the estimated average days missed or with reduced ability were 8 during the preceding 3 months. By age 74, that had changed to an average of 5 missed or reduced housework days.

"These findings suggest that the burden of chronic migraine on productivity is substantially greater than that of episodic migraine throughout adult life," Dr. Buse said at the congress, which was sponsored by the International Headache Society and the American Headache Society. ■

## VITALS

**Major Finding:** Missed or disabled days for people with chronic migraine peak at age 24 years, with an average of 18 days during the preceding 3 months.

**Data Source:** Data on nearly 12,000 of 24,000 subjects in the American Migraine Prevalence and Prevention Study, an ongoing, longitudinal, prospective questionnaire study.

**Disclosures:** The National Headache Foundation, Ortho-McNeil Neurologics Inc., and Allergan Inc. fund the ongoing study. Dr. Buse said she had no relevant financial disclosures.

## Psychiatric Comorbidities Do Not Interfere With Headache Treatment

PHILADELPHIA — The comorbidities of anxiety and depression may not portend poorer outcome in patients being treated for severe migraine.

In fact, compared with patients who did not have anxiety or depression, patients with those disorders actually experienced greater improvement in their headache-related disability scores in a study conducted over 16 months, said Elizabeth Seng, a doctoral student in the department of psychology at Ohio University, Athens.

The results seem to belie conventional clinical wisdom that patients with psychiatric comorbidities don't respond to headache therapy as well as others, Ms. Seng said at a poster session at the International Headache Congress.

But clinician perception, rather than clinical response, is probably the root of this belief, she said in an interview. "I don't think this speaks as much to the relationship between psychiatric comorbidity and migraine, as to our assumptions about how that relationship impacts migraine treatment. In this study, participants who had comorbid depression and anxiety actually changed more over

treatment," reaching the same end points as those without depression or anxiety.

She extracted her results from the unpublished Treatment of Severe Migraine trial, led by Kenneth Holroyd, Ph.D., also of Ohio University. The trial randomized 232 patients with severe migraine. Everyone received optimal acute therapy including an abortive medication. Patients were then assigned to one of four treatment arms: placebo, beta blocker, behavioral management plus placebo, or behavioral management plus beta blocker.

The trial consisted of a 4-month run-in period and 12 months of treatment. Behavioral management consisted of clinic visits, telephone calls, and homework. The homework focused on relaxation, migraine warning signs and effective medication use, stress management or thermal biofeedback, and establishing an individual migraine management plan.

The cohort was 79% women, with a mean age of 38 years. They had an average of five headaches a month.

At baseline, patients with either anxiety or depression had higher average scores on the

Headache Disability Inventory (HDI) than did those without the disorders (56 vs. 41, respectively). They also had higher scores on the Migraine-Specific Quality of Life (MSQOL) Questionnaire (43 vs. 37).

After 1 year, both groups improved significantly and similarly on both scales, regardless of their randomization group. On the HDI, those with comorbidities decreased an average of 33 points, to a score of 23; those without comorbidities dropped an average of 21 points, to a score of 20, Ms. Seng reported at the congress, sponsored by the International Headache Society and the American Headache Society.

On the MSQOL, the group with comorbidities dropped an average of 22 points to a final score of 21. The group without comorbidities dropped an average of 15 points to 22.

Ms. Seng cautioned that the results are preliminary, and the trial excluded patients with medication overuse headache.

The study was supported by the National Institutes of Health. Merck and Glaxo-SmithKline provided the study medication. Ms. Seng had no disclosures to report. ■

## Migraine a Risk Factor for Cervical Artery Dissection

PHILADELPHIA — Migraine with aura seems to be a risk factor for cervical artery dissection, Dr. Ville Artto concluded in a poster presented at the International Headache Congress.

His study of 626 subjects found that migraine and migraine with aura were significantly more common in men and women who had experienced a cervical artery dissection than in controls.

The pathophysiologic link between migraine and cervical artery dissection remains unclear, Dr. Artto said. More than 60% of the cases who had active migraines at the time of their dissections, however, reported that their migraines were alleviated after the incident.

Patients with migraine and cervical artery dissection may represent a link between ischemic stroke and migraine, wrote Dr. Artto of the Helsinki (Finland) University Central Hospital. "This connection may represent common pathophysiological or genetic background, or both."

The study included 313 patients, mean age 46 years, with cervical artery dissection and 313 age-matched controls. Cases were significantly more likely to smoke than were controls (37% vs. 23%) and female cases were significantly more likely than fe-

male controls to be using oral contraceptives (36% vs. 25%).

Migraine was present in 36% of cases and in 23% of controls. Migraine with aura was present in 23% of cases and 12% of controls. Both differences were significant. In women, migraine was present in 54% of cases and 35% of controls; migraine with aura was present in 35% of cases and 18% of controls. Among males, migraine was present in 27% cases and in 16% of controls; migraine with aura was present in 16% of cases and 0.4% of controls.

When the investigators compared the characteristics of the dissection between cases with and without migraines, they found similar rates of vertebral artery dissection, bilateral dissection, occlusion, and intracranial dissection. The National Institutes of Health Stroke Scale score was not different at onset (3 in migraineurs and 4 in nonmigraineurs). The Rankin score was similar at 3 months (1 in both groups). The rate of ischemic stroke was 68% in migraineurs and 73% in nonmigraineurs—not a significant difference.

The International Headache Society and the American Headache Society sponsored the congress. Dr. Artto report no potential conflicts of interest. ■