Combined Treatment Eases Migraine Activity

Three-part therapy produced at least 50% reduction in episodes, migraine days in 80% of patients.

BY KERRI WACHTER
Senior Writer

WASHINGTON— The combination of optimized acute medication, preventive medication, and behavioral therapy significantly reduced migraine activity, according to study results presented at the annual meeting of the American Pain Society.

In a study of 232 patients with frequent, disabling migraine, Kenneth A. Holroyd, Ph.D., distinguished professor of psychology at Ohio University in Athens, and his colleagues assessed the effectiveness of optimal acute therapy (OAT); OAT plus preventive medications; OAT plus behavioral migraine management; or OAT plus a combination of preventive medications and behavioral migraine management.

All treatments reduced the number of migraine episodes. However, neither preventive medication nor behavioral management in combination with acute medication made a significant difference. But the combination of all three—preventive medication, behavioral therapy, and acute medication—caused a significant improvement in outcome, Dr. Holroyd said.

Potential participants met the International Headache Society criteria for migraine. They had to have a minimum of three migraines per month with significant migraine-related disability. Individuals with medication overuse complications were excluded. Patients who met these criteria completed a 5-week run-in period of acute therapy (triptans, NSAIDs, antiemetics, and rescue medications as needed).

Most of the participants were women (79%). The average age was 38 years and most patients were white (84%). Patients had an average of 5.5 migraine episodes per 30 days and 8.5 migraine days per month.

The patients were randomized to one of four treatment groups. Triptan dose and route of administration were adjusted to achieve optimal acute therapy. Use of antiemetic and rescue medications was adjusted for optimal effect. The primary preventive medication was propranolol-LA (up to 240 mg/day). However, if the drug was ineffective or intolerable, nadolol (up to 120 mg/day) was used. OAT and preventive medication doses were adjusted over a 4-month period to optimize efficacy. During this period, patients had monthly clinic visits and received two phone calls from study staff.

For behavioral migraine management, patients were taught a variety of skills that have been shown to be effective. Patients learned about identifying warning signs and triggers, effective use of medication, reducing the impact of migraine, and biofeedback. Instruction involved clinic visits, telephone calls, home workbooks, and audio tapes.

All patients had five clinic visits (baseline and four monthly visits), which primarily involved medication monitoring, dose adjustment, and quality of life assessment. Quality of life was assessed using the Headache Disability Inventory and the Migraine-Specific Quality of Life Questionnaire. Migraine activity and medication compliance were evaluated using a computer-based diary.

In terms of migraine activity, 80% of those who used both preventive medication and behavioral migraine management along with OAT had at least a 50% improvement in both episodes per month and migraine days per month. OAT alone, OAT with preventive medication, and OAT with behavioral management resulted in less than half of patients experiencing at least a 50% reduction in migraine activity. Looking at quality of life, both the OAT/preventive medication approach and the OAT/behavioral management approach produced improvements over OAT alone.

It is hypothesized that migraines tend to occur in clusters because there is progressive sensitization during the course of a migraine that can persist for up to 96 hours, leaving the sufferer vulnerable to subsequent episodes.

"It's possible that if you completely abort the first migraine before it becomes severe, subsequent migraine clusters won't occur," Dr. Holroyd said. ■

Midlife Migraine Predicts Brain Infarcts Later in Life

BY DENISE NAPOLI
Assistant Editor

WASHINGTON — Migraines in midlife with accompanying visual aura predict later-life brain infarcts, according to a poster presentation at the annual meeting of the American Neurological Association.

Furthermore, the relationship between migraine with aura and late-life cortical and cerebellar infarcts "was not explained by measured cardiovascular risk factors," wrote the authors.

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In a longitudinal, population-based MRI study, A.I. Scher, Ph.D., of the National Institute on Aging, in Bethesda, Md., and associates looked at 1,843 subjects (812 men) from the Reykjavik (Iceland) Study, which began in 1967. All patients were born between 1907 and 1935, and had an average follow-up of 25 years. "Midlife" assessments took place at an average age of 49 (range of 34-59 years) and "late-life" assessments occurred at an average age of 75 (range of 66-90 years).

For patients who reported headache either once or more per month, data were gathered about associated nausea or vomiting, unilateral location, phototopia, visual disturbance during/just before headache, and any unilateral numbness before headache. Subjects also were assessed for cardiovascular risk factors, including blood pressure, total cholesterol, triglycerides, fasting glucose, hypertension, diabetes, and whether they smoked.

Participants underwent a Flair MRI in 2002 and subcortical, cortical, and cerebella infarcts were examined.

Overall, 80% of men and 60% of women experienced none of the associated headache symptoms. Some 14% of men and 22% of women experienced one to two symptoms; slightly less than 2% of men and nearly 7% of women experienced three or more symptoms. About 4% of men and 8% of women experienced headache with visual aura. Other symptoms were reported by a small minority of men and women.

The relative odds of late-life brain infarcts in those with headache plus visual aura versus those without headache symptoms (adjusted for age, gender, sampling stage, and duration of follow-up) was 2.35 in the cortical region (*P* less than .005). Those with headache and visual aura had an OR of 1.82 of having an infarct in the cerebellar region, compared with nonheadache subjects (*P* less than .05). The odds for migraineurs with aura having an infarct in the subcortical region were neither increased nor significant.

Those who reported other symptoms did not have significantly increased odds of brain infarcts in observed regions. ■

Chronic Pain Worse Among Emergency Department Patients

BY BRUCE K. DIXON
Chicago Bureau

CHICAGO — Emergency department patients with a history of chronic pain rate their pain as more severe than acute pain patients do, based on a prospective, observational study conducted in 20 emergency departments, said Dr. Martha L. Neighbor at the annual meeting of the Society for Academic Emergency Medicine.

Furthermore, chronic pain associated with headache, migraine, back pain, cancer, sickle cell disease, substance abuse, and psychiatric disorders is highly prevalent in the ED, said Dr. Neighbor of San Francisco General Hospital and professor of medicine at the University of California, San Francisco.

Most of the 50 million Americans with chronic pain will have breakthrough pain, and many will seek ED care, Dr. Neighbor said in an interview, adding that little is known about this subgroup of patients.

In a prospective, observational study of 246 chronic pain patients and 389 acute pain patients at 20 EDs in the United States and Canada, patients with chronic pain had dissatisfaction scores of 4.9%, compared with dissatisfaction scores of 4.7% for those patients with acute pain.

Data were derived from structured interviews, medical record abstraction, and telephone follow-up. All patients had moderate to severe pain (numerical rating scale, or NRS, of 4 or greater on a scale of 10) and were enrolled during six 8-hour shifts over 2-week periods with all shifts of the 24-hour cycle represented, Dr. Neighbor explained.

When the patients were asked why they came to the ED, 56% said they were there because of chronic pain, which was defined as continuous or intermittent pain of 1 month or longer duration, she said.

Patients with chronic pain had significantly more severe pain at all time measurements, from arrival in the ED through discharge to a 1-week telephone follow-up. On arrival in the ED, the median NRS was 8.0 in the chronic pain group and 7.5 in the acute pain group. On discharge, the pain ratings were 6.1 and 5.2, respectively. And at follow-up, they were 3.7 and 2.1, respectively.

In examining analgesia differences, the investigators found that patients with chronic pain were more likely than patients with acute pain to:

- Feel the need for analgesics (77% vs. 67%).
- Ask for analgesics (33% vs. 22%).
- Report that they have allergies to analgesics (19% vs. 5%).
- Take analgesics both at ED presentation (37% vs. 17%) and at follow-up (87% vs. 79%).

"Patients with chronic pain are experiencing more severe pain than acute pain patients do," Dr. Neighbor said in an interview.

Because they typically are taking analgesics, they "may be more challenging to deal with as far as improving their pain care is concerned."

Fortunately, at least in the ED setting, those patients are just as likely as acute pain sufferers to receive analgesics. Whether improvements in ED pain management practice will lead to better outcomes in this population is unknown, she concluded. ■