New Headache Findings Highlight Need for Prevention, New Directions in Development

Recent research suggests exciting new directions in clinical care and therapeutic development for headache.

When clinicians and researchers gathered for the American Headache Society Annual Meeting this summer in Washington, DC, several findings garnered attention. Below are summaries of some of the major research presented, along with other recent updates in the field.

Childhood Abuse/Migraine Link: Clinical Implications
Evidence suggests the association between childhood abuse and migraines may be strong enough to warrant questioning patients about a history of abuse, presenters said. In a plenary presentation entitled “Maltreatment in Headache: Epidemiology, Neurobiology, Evaluation and Treatment,” Gretchen E. Tietjen, MD, Director of University of Toledo Medical Center’s Headache Treatment and Research Program, noted that there is considerable preclinical and clinical evidence that chronic early life stress produces changes in the neuroendocrine system, leading to effects on body processes including the immune system, mood/emotions, and sexuality.

“We are finding an unusually high prevalence of childhood abuse in migraine patients.” Dr. Tietjen said. “This seems to be more than a psychological reaction to maltreatment. We are examining the idea that early abuse—no matter what kind—creates permanent changes in the neurobiological system of abused persons that may make them more prone to migraine pain.” Treatment with serotonin-specific reuptake inhibitors (SSRIs) show promise among researchers who believe they may reverse some neurobiological effects associated with maltreatment, she said. For example, SSRIs may help decrease hormonal response to stress.

Asking patients about possible childhood abuse may have benefits for the individual, but as yet may not influence care. “Many patients seem relieved when we ask them about abuse,” Dr. Tietjen noted, “but we need much more research to tell us if such information can really influence how we treat them.” Psychological counseling may be indicated for some patients, whether or not it affects their headaches.

Many Patients Can Predict Migraines
Up to one third of migraine with aura patients can anticipate a headache. Specialists suggest they should be encouraged to monitor their own symptoms and may one day be able to fine-tune treatment accordingly. Patients report experiencing symptoms up to a day before an attack, including mood changes, fatigue, problems with concentration, yawning and pallor, increasing sensitivity to light and sound, “and a general feeling that the attack is about to begin,” according to R. Allan Purdy, MD, of Dalhousie University in Halifax, Nova Scotia.

Though the premonitory phase is well-documented, Dr. Purdy says interest in trying to intervene therapeutically at this stage is relatively new.

Gene Discovery Suggests New Approaches to Prevention
Researchers may be close to finding a true preventive therapy for migraine. Speaking at the AHS Annual Meeting, Guy A. Rouleau, MD, of the continued on pg. 20
patient-doctor communication and ultimately patient care,” she says. Given the findings of the research, Dr. Wells suggests that clinicians should directly question patients about CAM use. “Since so many patients with migraines/severe headaches are using CAM therapies without their providers’ knowledge,” she asserts, “it is very important for physicians to ask their patients about their use of CAM.”

**Are there potential implications for your research in terms of therapeutic research?**

“Since we found that CAM use is significantly more common in US adults with migraines/severe headaches than adults without, and mind/body therapies are the most frequently used CAM therapy in adults with migraines/severe headaches, definitive randomized controlled trials are needed to understand the potential therapeutic benefits, mechanisms, side effects, and risks of CAM therapies in adults with migraines/severe headaches,” Dr. Wells asserts.


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**Chronic Migraine is Costly**

Cross-sectional analysis of an Internet survey of patients from 10 countries shows that in both the US and Canada chronic migraine patients had higher healthcare utilization and associated costs. In the US, 26.2 percent of chronic migraine patients said they had been to a primary care provider (PCP) in the preceding three months, compared to about half as many (13.9 percent) of the episodic migraine sufferers. In Canada, nearly half (48.2 percent) of chronic migraine sufferers had been to their PCP in the preceding three months, versus 12.3 percent of episodic migraine sufferers. Total mean headache-related costs for chronic migraine sufferers in the US was $1,036 over three months, compared to $383 for episodic migraine. Costs in Canada were about 2.5-times lower for each type of headache. Researchers suggest that therapies to reduce headache frequency may be important to reduce healthcare utilization and associated costs. (Headache. 51(7):1058-1077)

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**Preventives Work for Medication Overuse Headache**

A randomized controlled trial shows that early introduction of prophylactic medications effectively reduces headache frequency in both the short (three months) and long term (one year) in individuals diagnosed with medication overuse headache (Acta Neuro Scand 124(s191):38-43). Of 50 patients available for follow-up at four years, one-third of patients had a 50 percent or greater reduction in headache frequency from baseline, and two-thirds were no longer classified as medication overusers, following initiation of prophylactic therapy. Researchers also said that withdrawal of analgesics is not necessary for headache reduction, according to the data for these patients.