Inhaled Drug Limits Prolonged Migraine

**Major Finding:** An investigational, inhaled form of dihydroergotamine was significantly more likely than was placebo to relieve pain within 2 hours in patients who took treatment more than 8 hours after headache onset (92% vs. 52%, respectively) and in patients who took treatment earlier.

**Data Source:** Post hoc analysis of data from a randomized, double-blind trial of 771 patients who treated a single moderate to severe migraine.

**Disclosures:** Dr. Tepper and each of his associates reported.

Rates of freedom from pain were not significantly different after 24 and 48 hours.

Data on adverse events in 404 patients in the inhaled dihydroergotamine group and 401 in the placebo group suggest that the drug is well tolerated.

**Prolonged Pain Relief**

Among those who started treatment after an hour but within 4 hours of onset, 53 (36%) on inhaled dihydroergotamine and 35% with placebo. Among those who started treatment after an hour but within 4 hours of onset, 57% on inhaled dihydroergotamine and 21% on placebo reported pain relief 2 hours later. Pain relief also occurred in 53 patients on inhaled dihydroergotamine (78%) and 30 on placebo (52%) who took treatment after 4 hours but within 8 hours of migraine onset.

**Cognitive Deficits in Migraineur With Aura, Circulatory Shunting**

**LOS ANGELES** – Cognitive deficits can occur between episodes of migraine with aura in patients with a large right-to-left shunt in the heart, according to interim results of a small, prospective, double-blind, observational study.

In the Comorbidities Associated With Migraine and Patent Foramen Ovale (CAMP) study, 20 patients with large right-to-left shunts scored significantly lower on measures of auditory and verbal memory and learning than did patients with no right-to-left shunt. There was a significant inverse relationship between test scores and the number of embolic tracks detected on transcranial Doppler sonography, Jill Jesurum, Ph.D., and her associates reported at the meeting.

No significant differences between groups were seen in tests of visual memory, learning, and processing speed. Patients with large right-to-left shunts scored higher on one of seven tests of cognitive efficiency and attention, but overall there seemed to be no significant difference between groups in this category. The neuropsychological tests used in the study emphasized cognitive function in brain regions supplied by the posterior circulation.

These early trends suggest temporal or hippocampal involvement and vulnerability to microembolic hypoperfusion, said Dr. Jesurum, scientific director of the Heart and Vascular Institute at Swedish Medical Center, Seattle.

However, the source of the right-to-left shunts has not yet been confirmed by echocardiography as perhaps being due to a patent foramen ovale, she said.

Dr. Jesurum advised caution in interpreting these interim results on such a small number of patients.

She speculated that circulating shunting of unfiltered microaggregates and vasoactive chemicals to the cerebral vasculature may occur with right-to-left shunting and produce recurrent transient ischemia, theoretically increasing the risk of cognitive dysfunction.

**Visual Disturbances Following Foam Sclerotherapy Deemed Aura**

**LOS ANGELES** – Visual disturbances reported by patients after foam sclerotherapy are migrainous aura and should not be confused with cerebrovascular events, a small, prospective, multicenter study suggests.

In the study, a headache specialist analyzed questionnaires that were completed by 20 consecutive patients who reported visual disturbances after undergoing foam sclerotherapy at 11 French outpatient phlebology clinics.

All patients underwent cerebral MRIs within 2 weeks that were interpreted by a radiologist and again by a neuroradiologist.

Dr. Anne Donnet of the Pôle Neurosciences Cliniques at Hôpital TIMONE, Marseille, France, and her associates concluded that six patients had aura with nonmigrainous headache, five had aura without headache, four patients had the characteristics of aura with migraine without headache, and one did not have a headache or aura classification identified.

Dr. Donnet and her colleagues reported their findings in a poster presentation.