**Magnetic Stimulation Eased Burning Mouth Pain**

WASHINGTON — “Burning mouth syndrome,” a constellation of symptoms involving burning sensations of the tongue, palate, lips, and buccal mucosa, responds to transcranial magnetic stimulation and drug treatments that increase levels of GABA, glutamic acid, and creatine in various regions of the brain.

The neurologic condition, which occurs late in adulthood, is most common among postmenopausal women. The specific etiology remains unknown.

Many primary care physicians are unfamiliar with the phenomenon of burning mouth syndrome, and tell patients that they are imaging things, or that they are simply anxious, said Dr. Richard I. Henkin, M.D., at the Clinical Research 2005 meeting.

Among patients 12 years older, the Food and Drug Administration approved in controlled studies.

The patients in the poster study who did not respond to TCMS have been treated with GABA-ergic drugs, but this treatment is ongoing and the results have yet to be analyzed, Dr. Henkin said.

Drug therapy for burning mouth syndrome requires careful supervision and time, compared with the simple, rapid, and direct improvements associated with TCMS, he noted.

Dentists or primary care physicians are often at a loss about how to treat patients’ “dragon breath,” and burning sensations in the oral cavity, since there is no anatomic change in the tissue. When a patient presents with such complaints, consider a neurologic referral and an evaluation for GABA-related treatments.

For more information about the diagnosis and treatment of burning mouth syndrome and other taste and smell disorders, visit www.tasteandsmell.com.

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**Aczone Gel 5% and Adderall XR**

BY DAMIAN McNAMARA, MIAMI BUREAU

Aczone Gel, 5% (Dapsone gel, QLT Inc.) The Food and Drug Administration approved Aczone (dapsone) Gel, 5% for the topical treatment of acne vulgaris in patients 12 years older.

**Recommended Dosage:** Gently wash skin and pat dry. Then apply a pea-sized amount in a thin layer to affected areas twice daily.

**Special Considerations:** Obtain levels of glucose 6-phosphate dehydrogenase (G6PD) before initiating therapy with Aczone gel. Close monitoring of blood hemoglobin levels and reticulocyte counts is warranted for patients with G6PD deficiency or a history of anemia.

Oiliness/peeling, dryness, and erythema were the most common adverse events reported in controlled studies.

**Comment:** Efexor was based on two clinical studies that compared Aczone Gel, 5% and vehicle in a total of 3,000 patients 12 years and older. After 12 weeks, there was a statistically significant decrease in the number of acne lesions and improvements on the Global Acne Assessment Score with treatment versus vehicle alone.

Prior to treatment, patients with burning mouth syndrome had significantly lower levels of GABA compared with healthy volunteer controls who were age- and sex-matched to the patients. Dr. Henkin said at the meeting, which was sponsored by the American Federation for Medical Research.

Treatment with transcranial magnetic stimulation (TCMS) increased the GABA concentrations in the brain and relieved the burning sensations in 31 (68%) of the 46 treated patients. Their response suggests that the etiology of burning mouth syndrome lies in changes in a specific inhibitory neurotransmitter in the central nervous system.

For the TCMS treatment, the patients, acting on their own controls, received TCMS on each shoulder and the neck at levels of 0.2-0.4 Tesla (T), the unit used to measure magnetic field intensity prior to the application of TCMS to the head at the level of 1.1 T. The patients reported no changes in their burning mouth sensations at 0.2-0.4 T, but 31 of the 46 patients who received magnetic stimulation to the head at a level of 1.1 T reported improvement in the burning sensations.

The magnetic treatment had no apparent side effects, no associated pain, and relieved the burning feeling in a matter of hours or days.

The results of the study provide measurable evidence that brain GABA levels mirror patients’ pain levels, going up or down with brain GABA levels as shown in the images of MR spectroscopy of brain neurotransmitters, which show a 2-dimensional spectrum of the inhibitory neurotransmitter GABA.

Pharmacologic treatment with GABA-ergic drugs may be helpful to patients who don’t respond to magnetic stimulation. The dose and length of treatment with GABA-ergic drugs to lessen the pain of burning mouth vary widely among patients, said Dr. Henkin, reporting on his experience.

The results may be complicated by side effects. For a drug such as haloperidol, for example, doses may vary from 0.5 to 1.5 mg daily and patients may need to take them for 4-10 weeks to obtain an effect. In addition, patients often need a maintenance dose, which may range from 0.25 to 0.5 mg. By contrast, most patients treated with TCMS find long-term relief after a few sessions and approximately 20% experience relief within a week of a single treatment. Dr. Henkin said.

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**Comment:** Approval was based on a randomized, double-blind clinical trial of 327 adolescents 13-17 years old. All met DSM-IV/IV criteria for ADHD. The FDA approved an adolescent indication for Adderall XR, a once-daily treatment for attention deficit hyperactivity disorder, in patients 13-17 years.

**Recommended Dosage:** Begin adolescents 13-17 years with 10-mg/day Adderall XR. Dose may be increased to 20 mg/day after 1 week if symptoms of ADHD are not adequately controlled.

**Special Considerations:** Loss of appetite, insomnia, abdominal pain, and weight loss were the most commonly reported adverse events in a clinical trial of 233 adolescents treated with Adderall XR. Eight participants in this study withdrew because of these side effects.