Yes—Behavioral therapy is necessary for the complete treatment of migraine and chronic migraine.

Attention to psychological and behavioral issues become even greater treatment considerations as the frequency of a patient's migraine increases, there is increased disability secondary to headache, and/or there is inadequate response to usually effective treatment. As migraine becomes more chronic, headache-related disability increases, there are higher direct and indirect costs, and there are higher rates of co-morbid conditions, greater poly-pharmacy, and greater social impediments. Such findings highlight the complexity of such patients which necessitate a comprehensive, behavioral treatment strategy. Hence, behavioral therapy is necessary for the complete treatment of migraine and chronic migraine.

It should be emphasized that behavioral and other non-pharmacological treatments are not anti-pharmacological. The combination of both pharmacological and non-pharmacological treatment has been shown to be superior to each individually and appear to maximize long-term therapeutic benefit. It is a mistake to view pharmacological vs. behavioral treatment strategies as adversarial, contradictory, or oppositional.

In addition, effective non-pharmacological therapies help to ensure pharmacological treatment compliance which has been shown to be a significant problem with headache patients. Barriers to the use of abortive and preventive medications have been identified and have been found to be limiting factors in treatment efficacy. Modifying maladaptive behaviors which undermine adherence to pharmacological treatment is a critical component in the treatment of migraine and chronic migraine. This underscores the reality that pharmacological treatment involves a series of behaviors, and therefore, should be considered "behavior therapy" as well as a non-pharmacological treatment strategy.

The American Academy of Neurology-U.S.Consortium noted a variety of reasons that cause migraine patients to seek behavioral and other non-pharmacological treatment for migraine headache. These include:

- 1. Patient preference.
- 2. Poor tolerance/poor response to preventive medications.
- 3. Medical contraindications to medications.
- 4. Pregnancy, planned pregnancy, or nursing.
- 5. History of overuse of acute-care medications.
- 6. Significant stress or deficient stress/pain coping strategies.

More than 100 empirical studies have examined the efficacy of bio-

behavioral therapies and headache. The American Academy of Neurology-U.S. Consortium published evidence-based guidelines for migraine headache treatment and concluded that relaxation training, thermal biofeedback combined with relaxation training, EMG biofeedback, and cognitive-behavioral therapy were effective treatment options for migraine. These results have been confirmed in other meta-analytic reviews. Research has identified a variety of "modifiable" risk factors (including medication overuse) that appear to be associated with the escalation of the frequency and severity of migraine headache and are amenable to behavioral treatment. These include attack frequency, obesity, medication overuse, stressful life events, caffeine overuse, and snoring/sleep apnea. These risk factors are amenable to behavioral treatment.

The above behavioral treatments are critical in formulating a treatment strategy to address the modifiable risk factors noted above for the escalation of migraine. Effective treatment begins with a thorough diagnostic interview and the introduction of a headache diary as a tool for self-monitoring. Educating patients about headache mechanisms and the course of treatment allows a collaborative relationship between the patient and clinician. Patients must be "active participants" in the management of their headache issues. It is essential that clinicians monitor and be attentive to treatment adherence with respect to both pharmacological and non-pharmacological treatment strategies.

Yes—Behavioral therapy is necessary for the complete treatment of migraine and chronic migraine.