The following Protocol contains medical necessity criteria that apply for this service. It is applicable to Medicare Advantage products unless separate Medicare Advantage criteria are indicated. If the criteria are not met, reimbursement will be denied and the patient cannot be billed. **Preauthorization is not required.** Please note that payment for covered services is subject to eligibility and the limitations noted in the patient’s contract at the time the services are rendered.

**Description**

Biofeedback is a technique intended to teach patients self-regulation of certain physiologic processes not normally considered to be under voluntary control. Biofeedback is frequently used in conjunction with other therapies (e.g., relaxation, behavioral management, medication) to reduce the severity and/or frequency of headaches.

**Background**

Biofeedback involves the feedback of a variety of types of information not normally available to the patient, followed by a concerted effort on the part of the patient to use this feedback to help alter the physiological process in some specific way. Biofeedback training is done either in individual or group sessions, alone, or in combination with other behavioral therapies designed to teach relaxation. A typical program consists of 10 to 20 training sessions of 30 to 60 minutes each. Training sessions are performed in a quiet, non-arousing environment. Subjects are instructed to use mental techniques to affect the physiologic variable monitored, and feedback is provided for successful alteration of the physiologic parameter. This feedback may be signals such as lights or tone, verbal praise, or other auditory or visual stimuli.

The various forms of biofeedback differ mainly in the nature of the disease or disorder under treatment, the biologic variable that the individual attempts to control, and the information that is fed back to the individual. Biofeedback techniques include peripheral skin temperature feedback, blood-volume-pulse feedback (vasoconstriction and dilation), vasoconstriction training (temporalis artery), and electromyographic (EMG) biofeedback; these may be used alone or in conjunction with other therapies (e.g., relaxation, behavioral management, medication). In general, EMG biofeedback is used to treat tension headaches. With this procedure, electrodes are attached to the temporal muscles, and the patient attempts to reduce muscle tension. Feedback on achievement of a decrease in muscle tension is provided to the individual, reinforcing those activities (behaviors or thoughts) that are effective. Thermal biofeedback, in which patients learn to increase the temperature of their fingertips through the use of imagery and relaxation, is a commonly employed technique for migraine headaches. In this technique a temperature sensor is placed on the finger, and the subject is taught to increase peripheral vasodilation by providing feedback on skin temperature, an effect that is mediated through sympathetic activity. The combination of thermal biofeedback and relaxation training has also been used to improve migraine symptoms. The pulse amplitude recorded from the superficial temporal artery has also been used to provide feedback. Temporal pulse amplitude biofeedback has been used to treat both chronic tension type headaches and migraine headaches.
Regulatory Status

A variety of biofeedback devices are cleared for marketing through the U.S. Food and Drug Administration (FDA) 510(k) process. These devices are designated by the FDA as class II with special controls and are exempt from the premarket notification requirements. The FDA defines a biofeedback device as “an instrument that provides a visual or auditory signal corresponding to the status of one or more of a patient’s physiological parameters (e.g., brain alpha wave activity, muscle activity, skin temperature, etc.) so that the patient can control voluntarily these physiological parameters.”

Related Protocols

Biofeedback as a Treatment of Urinary Incontinence in Adults
Biofeedback as a Treatment of Chronic Pain
Biofeedback for Miscellaneous Indications
Biofeedback as a Treatment of Fecal Incontinence

Policy (Formerly Corporate Medical Guideline)

Biofeedback may be considered medically necessary as part of the overall treatment plan for migraine and tension-type headache.

Biofeedback for the treatment of cluster headache is investigational.

Unsupervised home use of biofeedback for treatment of headache is not medically necessary.

Policy Guideline

Biofeedback may require 10 to 20 office-based sessions of 30 to 60 minutes each.

Medicare Advantage

Biofeedback is not medically necessary for the treatment of migraine and tension-type headache.

References

We are not responsible for the continuing viability of web site addresses that may be listed in any references below.


24. Centers for Medicare and Medicaid Services National Coverage Determination (NCD) for Biofeedback Therapy (30.1), longstanding national coverage determination and the effective date of this version have not been posted.

25. National Government Services (NGS) Local Coverage Determination (LCD): Outpatient Physical and Occupational Therapy Services (L26884), Revision Effective Date for services performed on or after 11/01/2013.

26. NGS LCD: Psychiatry and Psychology Services (L26895), Revision Effective Date for services performed on or after 03/01/2014.