

A Short Commentary on Biofeedback

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Biofeedback therapy is a technique, which involves in training the people to improve their health by controlling bodily processes which happens involuntarily like heartbeat, BP (Blood Pressure), muscle tension and temperature of temperature. Patches called as electrodes will be placed on different parts of the body to measure the heart rate, blood pressure, or other function. A monitor is used to display the results. With the help of biofeedback therapist, they will describe a situation and guide you through relaxation techniques. The monitor lets you see how your heart remaining relaxed. Initially, therapist use monitor to see the progress, but it will be able to achieve success without the using electrodes or monitor later. Biofeedback is an effective therapy for several health conditions, like treating high blood pressure, tension headache, migraine headache, chronic pain, and urinary incontinence.

Biofeedback Techniques

Several biofeedback techniques are in use to collect the information of an individual's responses. Depends on individual health condition and objectives, therapist will determine.

Machines and techniques may include:

Electroencephalogram (EEG): An EEG monitors brain waves activities linked to different mental states like relaxation, calmness, wakefulness, light sleep and deep sleep. This process is also known as neurofeedback.

Electromyogram (EMG): Electrodes or other types of sensors are used for EMG technique to measure the muscle tension. An EMG may be used to treat some illnesses in which the symptoms tend to worsen under stress. This EMG technique makes a patient aware of muscle tension allowing him/her to recognize the feelings before and try to control in right the way.

Galvanic skin response training: Sensors are used to measure person's sweat glands activity and the amount of perspiration on skin, which indicates the presence of anxiety. This can be used in treating the emotional disorders like phobias, stuttering and stammering and anxiety.

Temperature biofeedback: Sensors are attached to fingers or feet to measure the skin temperature. Because of stress in body, temperature often drops down with a low reading. This low reading can prompt a person to begin relaxation techniques. Temperature biofeedback helps to treat circulatory disorders, like Raynaud's disease, or can reduce the frequency of migraines.

Several exercises for relaxation are in use in biofeedback therapy.

- Deep breathing
- Mindfulness meditation
- Guided imagery
- Progressive muscle relaxation

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Benefits of Biofeedback Therapy

Biofeedback has been shown to be helpful in treating a various medical conditions. Some people choose biofeedback instead of drugs because of its no or less side effects. Below are few conditions which benefits from biofeedback therapy.

Chronic pain: By helping biofeedback technique it is east to identify tight muscles and then learn to relax those muscles, biofeedback also helps in relieving the discomfort of conditions like abdominal pain, low back pain, temporomandibular joint disorders (TMJ), and fibromyalgia. All ages people from children to older adults benefit with biofeedback therapy.

Headaches: Headaches are one of the best-studied in biofeedback uses. Muscle tension and stress can trigger migraines. Other types of headaches make symptoms worse. There is good evidence that biofeedback therapy relax muscles and ease to reduce the stress and severity of headaches. Biofeedback seems to be especially beneficial for headaches when it is combined with the medications.

Anxiety: Anxiety relief is one of the most common uses of biofeedback. Biofeedback lets you become more aware of your body's responses when you're anxious. Then you can learn how to control those responses in body.

Urinary Incontinence: Biofeedback therapy helps people who have trouble with controlling the urge to use the bathroom. Biofeedback helps women to find and strengthen their pelvic floor muscles that control bladder emptying. After several sessions of biofeedback, a woman with incontinence is able to reduce their urgent need to urinate. Biofeedback also helps children who wet the bed, as well as people with faecal incontinence (the inability to control bowel movements). Unlike drugs used to treat incontinence, biofeedback doesn't tend to cause any side effects.

High Blood Pressure: Biofeedback for high blood pressure has been mixed. Although this technique does seem to lower blood pressure slightly, biofeedback is not much effective as medication for blood pressure control.

Other biofeedback uses include:

- Attention deficit hyperactivity disorder (ADHD)
- Chronic obstructive pulmonary disease (COPD)
- High blood pressure
- Anxiety
- Depression
- Headaches and migraines
- Learning disabilities
- Asthma
- Autism
- Back pain
- Chronic pain
- Diabetes
- Epilepsy and related seizure disorders
- Head injuries
- Muscle spasms
- Insomnia
- Motion sickness

- Spinal cord injuries
- Constipation

Biofeedback Side Effects & its Risks: Biofeedback is considered safe. There are no negative side effects have been reported.

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