



## **Health Care Provider :: CES Synopsis**

### **What is CES ?**

CES, or cranial electrotherapy stimulation, is a therapeutic procedure using minute battery-powered current for the treatment of anxiety, depression, and insomnia.

Stimulation is generally applied through electrodes, small conductive gel pads, placed between the ears and the jaw. Physicians, however, may vary the site of treatment based on their own protocol or employ conductive rubber ear-clips in lieu of electrodes. The sensation is quite mild. The most a patient will experience during a session is a gentle tingling sensation.

### **Treatment Regimen**

CES is prescribed and monitored by a health-care professional and is typically administered once or twice a day for 30-45 minutes over a period of one month, after which the frequency may be reduced to twice or three times weekly. Positive results may be experienced almost immediately; though some patients might require as long as a month. For lasting benefits, treatment should be continued at irregular intervals, on an as-needed basis.

### **Advantages**

CES is non-invasive and user friendly. It has an unblemished safety record, and virtually no negative side-effects. It should be considered before the adoption of a pharmaceutical regimen.

### **History**

CES was developed in the former Soviet Union during the 1950s, its primary focus being the treatment of sleep disorders, hence its initial designation as “electro-sleep.” Treatment of insomnia was soon overshadowed, however, by psychiatric application for depression and anxiety.

East European nations soon picked up on CES as a treatment modality, and its use spread worldwide. By the late 1960s, animal studies of CES had begun in the United States at the University of Tennessee and what is now the University of Wisconsin Medical School. These were soon followed by human clinical trials at the University of Texas Medical School in San Antonio and the University of Wisconsin Medical School. More studies followed. The most extensive work on CES is presently being conducted at the Pavlov Institute in St. Petersburg, Russia.

The efficacy and safety of CES therapy can be attested to by approximately 1,000 articles, many of which are listed in four reviews put out by the Foreign Service Bulletin of the United States Library of Congress. There is

additionally a wealth of physiological and bio-engineering data on electro-sleep and electro-anesthesia, including 18 experimental animal studies. Human research studies on CES currently number more than 100. Its efficacy has been clinically confirmed through 28 established psychometric tests, computerized EEGs and topographical brain-mapping. Meta-analyses yielding positive results from the use of CES have been conducted at the University of Tulsa and at the Harvard University School of Public Health.

CES has been an international treatment modality for more than 50 years. Thousands of people worldwide continue to receive its benefits. Current estimates are that there are between 50-100,000 units in use globally.

### **Contraindications/Precautions**

There are no known contraindications for use of CES. There are, however, circumstances in which its safety has not been tested. CES should not be used without on-going clinical supervision by severe depressives, epileptics, those known to be pregnant, or by individuals with implanted electronic devices such as cardiac pacemakers or insulin pumps. The induced relaxation response, resulting from use of CES does not in any way impair reaction time. It is recommended, however, that CES not be used while operating dangerous or complex equipment or while driving.

Negative side effects are rare. Less than three percent of CES users report a slight headache. This is usually alleviated by simply turning down the current. If the headache recurs during ordinary use, cease using the unit and consult with your physician.

As with the use of any medical device, the physician/licensed practitioner should be informed of any medication or neurotransmitter blockers the patient is taking as well as the employment of cardiac pacemakers or other electronic devices as mentioned above.

CES is not a substitute for professional counseling, meditation, or constructive relationships. Used in conjunction with those efforts, CES assists the user in attaining a balanced emotional state.

### **Professional use**

Neuro-Fitness is continuously seeking to expand its base of health care professionals employing CES. There are numerous areas in which it may be employed.

For those interested in also providing units directly to their patients, contact us and learn how to incorporate CES into your practice.

**Insurance Information:** The CES Ultra is not usually covered by most Medical insurance. Some insurance companies will, however, provide reimbursement for the device (E1399) with a medical order and certification of necessity. Supplies (A4556) will usually be covered without additional medical orders or certification. Some will only consider rental. Call for assistance or if you need additional insurance codes. Neuro-Fitness LLC, however, does not accept insurance assignment.

## **For the Treatment of Anxiety, Depression, and Insomnia**

### **Areas of Application**

### **Professional Contexts**

#### **Stress Management**

Job-Related Difficulties  
Psychoanalysis  
Counseling  
Phobic Desensitization  
Biofeedback Adjunct

Psychiatrists/Psychologists  
Medical Doctors  
Employment Assistance  
Dentists  
Specific High Stress Occupations  
Law Enforcement Agencies

#### **Sport Medicine**

Pain Control  
Peak Performance  
Pre-Competitive Anxiety

Athletic Teams  
Sport Medicine Clinics  
Psychiatrists/Psychologists

#### **Pain Control**

Pre-surgery  
Post-Surgery  
Treatment of Stress Related Pain

Pain Centers  
Medical Doctors  
Hospitals  
Psychiatrists/Psychologists

#### **Drug & Alcohol Treatment**

Detoxification  
Withdrawal  
Relapse Prevention

Medical Doctors  
Treatment Centers  
Out-Patient Programs  
Psychiatrists/Psychologists

#### **Compulsive Disorders**

Smoking  
Eating

Smoking Cessation Centers  
Weight Loss Clinics  
Medical Doctors  
Psychiatrists/Psychologists

#### **Sleep Disorders**

Hospitals  
Sleep Clinics  
Medical Doctors  
Psychiatrists/Psychologists

## **Headache Management**

Headache Clinics  
Medical Doctors  
Psychiatrists/Psychologists

## **Learning Disabilities**

Attention Deficit  
Hyperactivity

Medical Doctors, Pediatricians  
Psychiatrists/Psychologists

## **Geriatrics**

Depression  
Anxiety  
Hyperactivity  
Dementia

Nursing Homes  
Retirement Centers  
Medical Doctors  
Psychiatrists/Psychologists