

Using Cranial Electrotherapy Stimulation Therapy to Treat Behavioral Health Symptoms in a Combat Operational Setting

MAJ Jean Paul Hare, MSC USA*; CPT Leah Hanson Misialek, MSC USA†; SGT Katy Palis, USA†; PFC Charmin Wong, USA†

INTRODUCTION

Addressing combat operational stress reactions (COSR) in the deployed setting can be a challenging endeavor. During the Global War on Terror, the modalities of psychotherapy and general medicine are not always feasible to manage COSR. Available behavioral health resources and practitioners remain taxed despite the most robust behavioral health billeting in recent history.¹ Studies have suggested that COSR symptoms including sleep problems, anxiety, and depression are common presenting issues in the operational setting.² Cranial electrotherapy stimulation (CES) is a treatment modality that passes low-frequency microcurrent into neuronal tissue. A growing body of research suggests that CES offers relief from symptoms associated with COSR in similar populations. A recent survey revealed that 50 to 66% of respondents using CES reported symptom improvement, with less than 1% reporting side effects.³ CES provided our behavioral health team with an innovative and efficient tool in improving functioning in our warfighters affected by COSR.

THE PROBLEM

COSR reactions have traditionally been managed through the application of supportive gestures augmented with psychotherapy and medications.⁴ During the deployment, it was the behavioral health team's experience that rest, nutrition, fitness, and psychotherapy were frequently neither feasible nor sufficient to restore maximum functioning in a timely fashion. The issue became further complicated by the Modification (MOD) 12 updated minimum fitness criteria for deployment to a combat zone that went into effect in December 2013.⁵ MOD 12 policy dictated criteria to ensure that deployed soldiers were suitable and healthy enough to

perform in Operation Enduring Freedom.⁵ It superseded previous standards of individual medical readiness, specifying prohibitive and disqualifying medical issues and medications. MOD 12 constrained traditional interventions for COSR in some instances during the deployment.

MOD 12 mandated service members deploying to the Central Command Area of Operations be rigorously screened for health and functioning before deployment.⁵ The second-order effect of this policy complicated the use of psychopharmacology in theater. MOD 12 required the waiver approval of the Central Command Area of Operations surgeon for application of psychopharmacological interventions in theater. This requisite equated to four echelons of approval to allow a service member to remain in theater if psychopharmacology was initiated. MOD 12 appeared to discourage prescribers in the brigade from initiating first-line medications for traditional COSR and behavioral health symptoms. If prescribed, medications could cause service members to become administratively unsuitable for their current deployment, which prescribers became wary of. When prescribers committed to using a medication, waiver requests added administrative demands to prescribers' already exhaustive workload. This climate created the opportunity for applying alternative treatment modalities to support Soldier functioning.

Psychotherapy, even at its most expeditious, requires time and resources that are sometimes not available or practical in the deployed setting. The traditional standard of care for contact with providers weekly or biweekly was greatly disrupted by administrative demands, intermittent connectivity, and travel issues. The brigade deployed with two licensed behavioral health providers responsible for care for approximately 4,500 individuals in supported units. The mission set was demanding and potentially traumatizing events were frequent. As a result, behavioral health resources were taxed when providing traditional psychotherapeutic interventions for COSR. These challenges created an opportunity to apply alternative modalities for care including an outpatient CES clinic.

OUR CES CLINIC

Our team established an outpatient CES clinic during our deployment to Kandahar, Afghanistan. The clinic was based on an outpatient model in place at Embedded Behavioral Health Team 4 at Evans Army Community Hospital, Fort Carson, Colorado.

*Behavioral Health, Medical Section, Headquarters Company, 4th Military Information Support Group (Airborne), 3350 Sapper Street, Fort Bragg, NC 28310.

†Behavioral Health, Charlie Company, 704th, Brigade Support Medical Company, 2nd BDE, 4th Infantry Division, 10138 Warfighter Road, Fort Carson, CO 80913.

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An E-4, Behavioral Health Technician was charged with the management of the CES clinic. She became responsible for the clinic administration, operations, and services. She accounted for the property, patient records, class VIII resupply, informed consent, psychoeducation, manufacturer support, and not-for-profit partner interaction. This technician was in turn overseen by the certified, licensed providers for staffing, initial diagnosis, and interpretation of results.

The CES clinic operated independently of the behavioral health section in most ways accepting referrals from behavioral health, physical therapy, and general medical providers. Frequently the CES modality and its rationale were presented to prospective clients at intake or triage. This was offered to service members whose symptoms were likely to improve with CES treatments based on available research.⁵ Clients were then scheduled into weekly seminars to discuss possible benefits, side effects, indications, and contraindications. The data presented in the seminar were verified by the manufacturer and followed current best practices.

Clients who chose to engage in a CES trial of treatment were afforded the opportunity to provide informed consent to treatment and begin a 10-day trial. Both the first and last session were documented in the electronic health care record. Certified, licensed providers would conduct or staff these two sessions. The intervening sessions were facilitated by technicians or trained medics under the supervision of the certified, licensed provider. Every session included logging the subjective improvements of symptoms for sleep, anxiety, depression, and pain according to the device manufacturer's recommendations.

The team established the CES clinic colocated with the brigade headquarters, but determined a need to extend the modality to more austere, outlying areas. Physician's assistants and medics in the most remote locations were certified in CES for anxiety, depression, insomnia, and pain through teleconference by the manufacturer in the United States. CES units were ordered through Brigade Medical Supply and positioned at organic battalion aid stations. Staffing and oversight of these operations were conducted by telebehavioral health conferences with the behavioral health team. This allowed access to the treatment option as far forward as possible.

If clients completed trials with a significant improvement in symptoms by subjective report, the certified, licensed provider would then prescribe and order an individual CES unit for the client. Units were frequently delivered to locations within 2 weeks.

TRAINING

Numerous companies market microcurrent technology devices that provide cranial stimulation. Providers should verify Food and Drug Administration certification of the CES devices for providing purported effect to treat the symptoms of pain, anxiety, sleep disturbances, and depression. Some CES man-

ufacturers will certify providers in the use of their equipment at no cost.

The CES device manufacturer agreed to conduct training and certifications in CES by video teleconference with our brigade's providers in the most austere settings. Certification examinations were administered online and certificates were e-mailed to the providers. This created the possibility for general medical providers, medics, and physical therapy technicians in our area of operations to become certified in the treatment modality in accordance with standards of practice.

At the time of this operation, a licensed health care professional credentialed through the Department of Defense was required for prescription and staffing of CES treatment. These specialties included masters-level social workers, clinical psychologists, physicians, physician's assistants, physical therapists, and occupational therapists with certifications in CES by the manufacturer.⁶ These licensed, credentialed health care professionals referred appropriate candidates while certified technicians and medics administered the treatments. On-site, licensed staff were always available to address abreactions and side effects, although none were reported during the deployment.

FUNDING

Brigade medical logisticians helped to prepare the letters of justification to order CES units. Funds remained available to order enough units to satisfy an outpatient clinic setting for the behavioral health section and outlying battalion aid stations. CES devices were then placed in every battalion aid station in which a certified licensed general medical provider was present.

At the time of the operation, there was a precedent for ordering durable medical goods such as CES for home use through Tricare in a CONUS Care setting; however, no such avenue was easily available for the deployed setting. The manufacturer's research on CES suggests that maximum dose benefits occur with daily use for weeks or months. This suggested that personally owned devices would be most efficacious for the clients using them.

If individuals at the CES Clinic met the criteria to participate in CES and benefitted from it in a 10-day trial, our section partnered with not-for-profit 503 (c) type organizations to purchase CES devices for individual service members. America's Fund was particularly generous in supporting the warriors of the brigade. Without this step, financing the individual CES devices would have proved difficult at best.

CONCLUSION

The use of CES and the model of establishing an outpatient clinic were both extremely beneficial to the mission. In many instances, this treatment option appeared to carry less stigma than the options of medication and therapy, branding the treatments as "performance enhancing" rather than a medicine for "sick and broken" individuals with COSR. This

approach made CES popular among many ranks and occupational specialties. CES does not necessitate constant licensed providers to supervise sessions, so it was cost and manpower efficient in the deployed setting. In consideration of the mission requirements, prevalence of COSR, MOD 12 implications, and limited behavioral health assets, CES was a helpful tool in conserving the strength of the fighting force.

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