

FAQ's for Clinicians

What is Ampcare's ESP® Therapy System?

The Ampcare's Effective Swallowing Protocol (ESP™) is a therapeutic intervention FDA-cleared for the treatment of dysphagia. This system is a specialized form of neuromuscular electrical stimulation (NMES) administered through uniquely designed external skin electrodes. The Ampcare ES unit is a portable, non-invasive, dual-channel electrotherapy system which emits electrical current to stimulate nerves that correspond to inactive or atrophied swallowing muscles, which leads to an improved quality of muscle contraction of the hyolaryngeal complex and improved swallow function.

Stimulation with ESP's submental placement and specially designed electrodes, facilitates the range of motion of the hyolaryngeal complex similar to that of the Mendelsohn Maneuver, while engaging a resistive effect to laryngeal vestibule closure. This resistance is created by a stretching effect or opening of the laryngeal vestibule. When the patient swallows during the stimulation on time, this movement creates the most effective effortful swallowing exercise you can offer to your patient. The facial placement can address oral deficits that include chewing, oral pocketing and anterior loss of bolus. This protocol only utilizes the safest swallowing strategies (indirect exercises) and offers a postural device to provide the ideal head and neck position to allow for the most efficient muscle contraction needed to promote a functional swallow. (E – Electrodes, S – Stimulator, P – Posture Device)

Do I need a certification to treat my patients with ESP?

Yes, there is a continuing education requirement on receiving the Ampcare certification allowing membership access to all of the Ampcare products. NMES is not all encompassing, and there are multiple ways that NMES can be utilized. There is a misnomer that NMES or "E-Stim" is just something that is turned on and used. A thorough understanding of this particular technique helps protect the clinician, the product and most importantly the patient. The primary certifications that the American Speech-Language Hearing Association (ASHA) recognizes include board certifications/specialties and the Certificate of Clinical Competence (CCC). Although a continuing education certificate shows additional educational knowledge, it neither guarantees nor confirms competence in a particular technique or device covered by a course. It is highly recommended that Speech and Language Pathologists (SLPs) receive ongoing training, stay current with the latest clinical developments with the technique and adhere to their Code of Ethics.

The focus of Ampcare's 8-hour Advanced-Level ASHA CE course is on establishing competency in the technique of ESP which is consistent with the Principle of Ethics I, Rule A which insists that clinicians provide all services "competently and admonishes against misrepresenting one's competence." Principle of Ethics II Rule B provides specific guidelines by stating that an individual should only practice in areas which they are competent based on their education, training and expertise.

Once I am certified in an FDA-cleared electrical stimulation treatment for dysphagia am I E-Stim certified in all forms of NMES?

No. Certification in a technology or specific protocol only offers training in their specific electrical stimulation parameters, placement and ideology. There are multiple types of electrotherapy currents (e.g. pulsed, alternating, direct) with different waveforms (e.g. biphasic,

interferential, premodulated) and a plethora of parameters (e.g. frequency, phase duration, intensity, duty cycle) that can be used to treat a variety of conditions (e.g. pain, edema/swelling, urinary incontinence, disuse atrophy) with the NMES modality. It is important to understand which forms you are using, and the how and why this can be used.

If I attend Ampcare's training, can I come back to my facility and train other SLPs to use the device?

We do not recommend any clinician use Ampcare products without individual completion of the certification process. This process is 8 hours of ASHA CE (e.g. either live or online) that will provide any Ampcare-treating clinician the tools and knowledge necessary to demonstrate competence in this new form of NMES for treating dysphagia. This not only protects the patient, the products and our profession, but also the clinician. When a clinician does not receive appropriate training or "certification" from the Ampcare sponsored course, yet utilizes the product with patients, they are not following the guidelines that ASHA provide.

ASHA Rules of Ethics:

- A. Individuals who hold the Certificate of Clinical Competence shall engage in only those aspects of the professions that are within the scope of their professional practice and competence, considering their certification status, education, training, and experience.
- E. Individuals in administrative or supervisory roles shall not require or permit their professional staff to provide services or conduct research activities that exceed the staff member's certification status, competence, education, training, and experience.

What are the benefits of the 8-hour ASHA CE live versus online training?

The benefits for attending the live, hands-on class over the online version would be the interaction with other clinicians and the trainer. There is an opportunity to participate in a question/answer session as well as having the hands-on activities where you demonstrate the use of the equipment versus just viewing a videotaped version of this interaction.

The benefits for choosing the online version include 12 modules, to be completed at your own pace at your computer. You must complete a short (3-5 questions) exam after each module to move forward through the training modules. This online CE training is a professionally taped version of our live class. It does not provide access to any of the live interactions that would be available in a live class format. Any questions that may arise during the course can be addressed via telephone or email during or after the online training.

We have not received feedback to suggest that one training would be better than the other; it would just be your preference.

What is the cost of the live and online trainings?

The Live CE Training cost is \$325 for the training only. If you are planning to purchase the ESP Kit (Includes: Ampcare ES unit, carrying case, User Manual, 2-lead wires, 2-batteries, 10 packages of either the Large/Adult or Small/Youth E Series Electrodes and Posture device), the CE Training cost is \$200, plus \$649 for the ESP Kit for a total of \$849 plus shipping and tax were applicable.

The cost for the Online CE training is \$150 plus shipping and tax were applicable for the CE Certificate. The course cost for the Online CE Training if you are purchasing the ESP Kit is \$100, plus \$649 for the ESP Kit for a total of \$749 plus shipping and tax were applicable.

Are the Ampcare E Series Electrodes reusable?

Yes, our protocol primarily uses 2 specially designed electrodes that are reusable, single patient use for approximately 5 treatments per pair. One package contains 2 pairs (4 electrodes) which will provide approximately 10 visits per package. There are situations when 4 electrodes may be used on a patient and, therefore, one package will provide approximately 5 visits. You will learn how to clean and store the electrodes during the training to allow for multiple uses, making the E Series Electrodes the most cost-effective FDA-cleared electrode on the market.

Does the Restorative Posture Device (RPD) have to be used with every patient?

The RPD is recommended for most patients, as it improves posture, conduction and stabilizes electrode placement. The benefits need to be evaluated on a patient-by-patient basis. NMES works best when it is paired with a resistive exercise. Ampcare applies this postulate by providing both an intrinsic and extrinsic resistive exercise when using the submental placement. ESP (NMES combined with a resistive exercise) can improve the plasticity of the brain by learning how to use remaining neural pathways more efficiently as opposed to creating new ones in that same period of time. Refer to the peer-reviewed research on the RPD at:

www.ampcarellc.com/research/

What medical specialists provide ESP?

Our training is open to all licensed medical professionals to work as part of a comprehensive team for the benefit of the patient. At this time we only offer ASHA CEUs. If you are interested in obtaining CEU credit, you would have to file a request with your Association using our course agenda (see an attachment on our course calendar) to view our course agenda/details at:

www.ampcarellc.com/training/

How is ESP used in swallowing therapy?

Traditional therapy methods applied for dysphagia often employ compensatory strategies (i.e. environmental modifications, behavioral strategies, postural changes) and specific exercises (Mendelsohn, Shaker, Effortful Swallows, etc.) aimed at improving the strength and coordination of the swallowing muscles. Patients are asked to perform specific traditional therapies that address their dysphagia during the exact time the electrical stimulation is occurring. ESP has specific electrical stimulation cycle “on” and “off” times that allow the patient to work on the timing of their swallow as well as giving them ample time to recuperate before the next resistive exercise.

Am I safe to swallow any food or liquid while using ESP?

ESP is a rehabilitative technique to be used only with indirect exercise (exercise programs or swallowing saliva) during the stimulation “On” times. The patient is able to swallow any food or liquid, deemed safe, during the “Off” times or by using the Pause button to allow for appropriate bolus prep and swallow time. On average you use 50 muscles from the time food or liquid enters your mouth until it reaches your stomach and no device can stimulate those muscles sequentially to consistently facilitate a safe swallow. This is covered extensively during the training.

What does ESP feel like?

Patients generally feel a slight tingling sensation at first, but the goal is to elicit a muscle contraction which generally feels like a pulling or tightening sensation. ESP offers two separate protocols (ESP 1 or ESP 2) to aid in the depth of current penetration and comfort of the treatment.

Is ESP painful?

No, the skilled use of ESP dictates that the parameters are modified in order to maintain patient comfort while still achieving the desired muscle contraction. It should never be painful during the therapy session.

Are ESP and VitalStim the same thing?

No. Although both are FDA-cleared for the treatment of dysphagia and provide electrical current through surface electrodes, ESP is fundamentally different than VitalStim. The principles of ESP follow the rules of electrotherapy for small muscle groups, and allow the capability of these parameters (frequency, phase duration and duty cycle) to be used safely on the neck. Ampcare's ESP is the only technology that can consistently move the hyolaryngeal complex in a forward and upward direction, similar to the Mendelsohn Maneuver, while creating a resistance to the laryngeal vestibule, and has evidence to speed up laryngeal vestibule closure (LVC). Refer to the peer-reviewed research on how ESP has shown to speed up LVC times at:

www.ampcarellc.com/research/

How long is a treatment session?

Recommended treatment sessions last for 30 minutes daily, typically 3 to 5 times per week, depending on the patient's status.

Can you use ESP less than five times a week?

Currently all of our peer-reviewed research has been using ESP five times a week when initiating treatment with the patient. As the patient progresses, or as the clinical setting dictates, there is also evidence that using NMES on other skeletal muscles can be beneficial with treatments two to three times a week after the acute phase of the condition has received intensive treatment.

What diagnoses can I use ESP with?

As important as the patient's diagnosis, past medical history and age are, Ampcare's ESP is best used as it relates more to the specific mechanical causes or physiological impairments (e.g. decreased tongue retraction, impaired hyolaryngeal excursion, delayed laryngeal vestibule closure) of the dysphagia as the emphasis for the treatment. During our ASHA CE training we will list the 12 mechanical causes of dysphagia that ESP can address.

The optimum patient from the research would be the neurogenic population where the rules of neuroplasticity would best be served: task specific, repetitive and resistive exercises for cortical remodeling.

How many treatment sessions of ESP are needed before swallowing improves?

Many factors need to be considered in determining if ESP will improve your patient's swallow including the mechanical cause of dysphagia, past medical history, etc. In the current literature, many patients often see a level of improvement in approximately 10 to 20 treatment sessions.

Are there any contraindications for ESP?

As with any form of treatment, ESP is not appropriate for everyone. ESP should not be used on those with implanted electronic devices (e.g. pacemakers/defibrillators) without following the proper protocol, over active neoplasm or infection, or on areas where active range of motion may be temporarily contraindicated (e.g. fractures, recent surgeries).

Are there any precautions for ESP?

ESP should be used with caution in patients with seizure disorders. Transcutaneous (over the skin) neuromuscular electrical stimulation has not shown to cause seizures in the literature. It is always beneficial to be proactive and be aware of the details regarding the patient's past medical history, medications, frequency and dosage.

Can you use Ampcare's ESP with the pediatric population?

ESP can be utilized with some of the pediatric population, depending on diagnosis and mechanical cause for the dysphagia. It is critical to identify the mechanical cause prior to deciding on applying ESP on the younger population. Ampcare products include smaller electrodes for this population. ESP has not been studied for the premature or neonatal infant population, or any of the patient populations whose swallow is more of the "suck, swallow, breath" reflexive patterns.

Can people with cochlear implant devices use ESP?

Yes, it is recommended that you turn the device off or remove the battery or processor if the patient reports any interference.

Does insurance cover ESP?

Medicare and a majority of insurance companies recognize and provide reimbursement for the treatment of swallowing dysfunction provided the treatment is medically necessary and delivered by a qualified professional using the CPT Code 92526. There are currently no additional codes available for SLPs to use additional NMES modalities for treating swallowing disorders.

How can I get ESP?

Once you complete an Ampcare course, you will receive your Ampcare certification number as well as membership to the Certified Users section of the website. Certified members will be given login access to our website where they can purchase products with a credit card under the BUY NOW headliner. You can also phone in your orders at 682-561-2444 ext. 1 or fax to 817-923-1377.