

Electrode Placement

The placement of TENS electrodes is not an exact science. Many times, different placements will relieve pain of like diagnosis. Perhaps the greatest difference between proper placement and less than desirable placement is not whether the patient gets pain relief but instead, how soon the patient gets relief. The worst thing that can occur from improper placement is nothing.

It is impossible in this brief paper to describe every diagnosis. Many electrode sites are identical regardless of the underlying cause. A patient who has a cervical strain would use the same placement as a patient with cervical arthritis.

There are different approaches to electrode placement.

Electrode Placement Guide Lines

Several sites on the body are known as “trigger points” or “acupoints.” There are many guidebooks on the market that can help you in learning just where these locations are on the patient's body.

Another term you should know is “dermatome.” A dermatome is the skin area of sensory nerve distribution. There is a nerve distribution area for each spinal level and is so designated by number. Example: Pain in the L-4 dermatome (skin area) follows the sensory nerve to the L-4 nerve roots (spinal level). There it enters the spinal cord and is transmitted to the brain. Dermatome electrode placement is generally on the nerve root along the side of the spine at the appropriate spinal level. Nerve roots are bilateral and do not cross midline.

Finding The Right Site

Through communication with the patient, determine the involved area of pain.

Palpate the pain sites for a sensitive or tender response. A sensitive response to palpation designates that point as a possible electrode site.

Attempt to locate at least three of these sensitive sites.

The electrodes are then applied to two, three, or four sensitive points and any remaining electrodes are placed on the appropriate nerve roots along the side of the spine.

All patients are generally started with four electrodes to improve the probability of success.

Deep organ pain can best be managed by placing the electrodes along the side of the spine on the involved nerve.

The “diagnosis” guide booklet provided during this training course is a good starting point for exact electrode placement as well as proper protocol for a given diagnosis. Understand, this booklet only examples the most common problems and is only meant to serve as a guideline.

Summary: Place the electrodes on or near the pain site. For most patients this will obtain the results you are looking for. Remember, placing the electrode in the wrong site will do no harm.