How to perform a Source of Pain Test

Pretest Preparation:

In the Diagnosis Room make sure that there is a counter or table with a 120 volt outlet for the Electrolytic Gel Bottle Warmer, a padded flat table for the patient to lie down on comfortably and a 120 volt outlet by that table for the Electric Heating Pad. Also have a sturdy stand or movable small table to place the ENS Unit where the Physician and an attendant can clearly see the screen of the ENS Unit.

Have the patient dressed appropriately so that the testing area and the electrode pads can be placed in the proper locations without their clothing getting in the way of the test. If the patient has body hair that will interfere with the connection of the electrode pads, those areas will need to be shaved to allow a good electrical connection. An electric shaver would be recommended so that when the shaved area is cleaned off with alcohol it will not cause a rash nor unnecessary discomfort to the patient.

If the patient claims to have radiating pain down their leg(s), then clean that area with alcohol on a cotton ball to remove body oils from the skin. Then place the adhesive electrode patch on that area if it is within Ten to Twelve inches away from the spine where the suspected nerve root would be located (such as between L4 and L5).

It's important for the patient to be warm and comfortable so that they can concentrate on the ENS testing and not on being cold nor uncomfortable. Place a heating pad or heated cotton towels on the patient to warm the testing area where the probe is going to be used to locate the point(s) where the pain is being generated from, as explained in #1 below.

Testing:

1. Warm the patients test area by placing a clean towel over the area, then the electric heating pad with another towel over the electric heating pad to help keep more heat going to the patient.
2. Place the self-adhesive Electrodes Three to Six inches away from the patient's spine (closer on the neck or further on their leg as mentioned above) in the direction that the nerves travel from the spine where the patient is reporting the pain. If the patient reports to have Radiating pain, also place an electrode over the area on their body where the pain is radiating to. If more than one electrode is needed to conduct the test you can connect them to the ENS using Arctoro Medical's multiple wire patch cord.
3. Attach the Probe's cable to the Arctoro Medical ENS unit and power it on. On the ENS's touchscreen select Target mA to 0.2 as a beginning point of mA.
4. After warming the testing area, apply the warmed electrolytic gel two to three inches above and below the suspected point of pain.

5. Place the Probe on the patient above the expected point of pain (where there is no pain) and press the Probe firmly on the patient's skin to activate the Probe. Place the tip of the probe in a vertebrae joint between One or Two spaces above or below where you suspect the pain should be generating from. If the patient doesn't feel anything at 0.2 mA then slide mA the indicator to the right, increasing the Target mA until they can feel a tingling sensation. It shouldn't have to be over 4.0 mA before the feel the tingling.
6. Adjust the mA up (or down) to the level that the patient can feel the pulses without it hurting nor so faint that they can barely feel it. Make note of that level of mA, it is the '**base line**' of mA for that patient in that location.
7. Keeping the Probe pressed firmly on the patient's skin, without releasing the pressure, slide it down over the test area directly above the patients nerve root (or facets if testing for facet pain) and tell the patient to tell you when they feel an increase of pain and/or a nerve sensation similar to placing aluminum foil over a metal tooth filling. Where they say that they have pain, mark that spot with a physicians pen or a Sharpie. ***If the Patient doesn't feel any increase in Pain nor sensation, increase the mA and run the Probe over the area again. If the patient hasn't mentioned an increase of pain and the graph screen on the ENS hasn't shown a spike up in voltage and the mA, especially when the Target mA setting is at 4.0 or higher) then you can make a decision on what to do at this point.***
8. If they do say that they feel an increase in pain, with a Sharpie or Physician's Pen, mark each spot where they state the pain has increased but the graph on the ENS didn't show a significant increase of mA and voltage, then proceed to number 9.
9. Repeat steps 2 through 8 on both sides of the patient's spine or facets if you believe that it is beneficial to know the results.

If the Patient does feel increase pain and the mA and voltage did spike up but the 'base line' of mA is at 3.0 mA or higher there most likely is a compromised nerve but it probably isn't causing Chronic Pain but rather Occasional Pain that would recur if they have an additional trauma that will reactivate the pain, such as a fall or accident.

Patients with chronic pain will feel the sensation on a compromised or injured nerve at a lower mA Baseline than 2.0 mA and will feel a sharp increase in pain when the Probe is over that nerve. The graph on the ENS will also show a significant spike up in mA and Voltage when the Probe is over the chronic pain nerve.

The amount of tissue and fat that the electricity needs to travel through can also cause a higher mA level needed to show proof of an injured or compromised nerve.