

What It Is: The passing of a current through the tissue to provide temporary pain relief.

- Interferential Current (IFC) is the most commonly used e-stim used in our clinic.
 - o Our E-stim unit converts standard 110-volt current into a useable and safe therapeutic waveform.

Why It Is Done:

- There are many reasons why E-Stim can be done. A few include:
 - o Temporarily decrease Pain
 - o Relax the muscles
 - o Promote healing
 - o Decrease Swelling
 - o Stimulates natural hormones
- Since it is an electrical current IFC cannot be done if you have a pacemaker.

How It Works:

- 4 sticky pads are placed around the treatment area. The red and black channels are set up diagonally from each other allowing the current to crisscross the area.
- The current is then turned up and should stay in a strong but pain free range.
 - o Nerve cells have a natural negative charge in them called the resting membrane potential. The negative area of charge from the electrode reduces the difference between the negative charge inside the cell and the tissues outside of the cell. The decrease in negative charge inside the cell causes the nerve cell to become more positively charged, resulting in the neuron firing. Repeated stimulation of the nerve results in diminished nerve sensitivity.
- You should feel the current strong but it should NOT be painful and it should NOT make the muscles twitch.
- There is no “normal” setting for IFC. Everyone is different and will feel the stimulation different. Even from one treatment to the next may feel different depending on the placement of the pads and how you are feeling that day.

What to Expect:

- o As the current is being increased, you will start to feel a tingling sensation. Like the feeling of your foot falling asleep.
- o This sensation will start to feel stronger (pins and needles).
- o STOP when you feel the stimulation is strong but still pain free.
- o It is normal to feel the stimulation a little less as the treatment goes on.
 - Your muscles get used to the stimulation and if you are also on ice it can numb the area.
 - It is normal to increase the stimulation a few times in the duration of the treatment.
 - But make sure each time it is increased it is still in a pain free range.
- o The relief of this treatment is only temporary.