IONTOPHORESIS DEVICE
Information booklet

Basic Treatment plan for Iontophoresis

Introduction

Treatment regimes are patient specific and requirements vary from person to person. By following a basic plan you will be able to discover what works for you in terms of power settings and treatment frequency. This will help you achieve the results you want.

Although there is no universally agreed satisfactory explanation of how iontophoresis works, it is believed that the currents passed into the body temporarily interfere with signals sent by the nervous system that tell the gland to produce sweat. When signals are sent, a chemical called Acetylcholine (ACH) is released by the body. ACH is an electrically charged neurotransmitter that triggers muscle movement at the gland causing sweat secretion. The mild controlled currents delivered by iontophoresis machines block these messages and the gland does not respond to the signals, thereby stopping sweat. This is a temporary effect and if regular maintenance treatments are not kept up, sweating will return to pre-treatment levels.

The basic principle is that you want to pass the maximum comfortable amount of current into the treatment area for the full recommended 15-minute session. This is facilitated by immersing the hands or feet into water filled trays or by placing water soaked applicators that conduct the current into the skin. If treating underarms, face or torso it is advised to perform two 7 minute sessions in order to re-soak the sponge applicators.

What is acceptable for one may not necessarily be for the next person. There is no set value you need to reach in order to see results. As such you should discover what your maximum comfortable power setting is and remain below that level throughout the treatment. It is counterproductive to try to push the treatment beyond what is comfortable. You may irritate the skin causing small breaks which will become further irritated with continued treatments. This is because the current will take the path of least resistance and the broken skin offers less resistance to the current.

Iontophoresis is a dynamic treatment and there are many variables that will affect the outcome. The power of the machine, quality of cables and electrodes, water quality, skin thickness, water temperature, body temperature, diet, hydration levels, severity of condition, etc. will all have an effect on response.

Contraindications

Iontopheresis should not be used if any of the following conditions apply:

- Patient with a cardiac pacemaker

- Patient with an ICD (implantable cardioverter/defibrillator)
- Pregnancy
- Patient with metal containing interuterine device (IUD)
- Metallic implants within the current path (arm/leg)
- Large skin defects/ wounds that cannot be covered with petroleum jelly
- Patients with impaired sensibility in their hands or feet (eg patients with polyneuropathies)

Getting Started

Please refer to the instruction booklet relevant to your make and model of machine for set up procedures. If you require help, give us a call on 08 6397 5120 and we will gladly talk you through it.

Initiation of treatment

All jewellery must be removed prior to treatment.

Perform 1 x 15-minute session every other day for the first three weeks at the maximum comfortable level. If treating underarms, face or torso it is advised to perform two 7 minute sessions in order to re-soak the sponge applicators. After that treatments should be twice a week for 15 minutes

Voltage Settings

This level will differ between patients and also between machines and treatment areas. Pulsed current machines offer milder treatments than those found on direct current machines and the feet will tolerate higher power settings than the hands or underarms. As a guide

- Underarms, face and torso will typically accept power ranges of between 8v-16v
- hands 20v-30v
- feet 30v-50v

Most patients will respond within 7-10 treatments (7-10 days). The response can be immediate or a more gradual reduction in sweating.

Elements that can affect response

*Water quality can have a profound effect on the conductivity of the current. If you have a water softener fitted this will strip out conductivity. You can use mineral water or try adding a pinch of bicarbonate of soda to each water tray if you feel water quality is an issue. You should be able to 'feel' the current slightly (although some never do, even at max power!)

*Ensure that the skin is completely clean and clear of any type of product such as antiperspirants, deodorants, moisturisers, even soap. All of these products will increase resistance to the current and in some cases prevent the current from flowing at all. The body acts as resistor in the circuit and the machines are set up for maximum and minimum tolerances. If the resistance is too high current may not flow, too low and the machine will not be able to deliver enough voltage to maintain the current. In this instance the machine will display a lower than entered value on the power display.

This normally changes over the course of treatment as the dermis dries. Very wet skin = low resistance. Dry skin = high resistance.

*Wash the area in warm water before treatment. Cold skin resists current. Also you can use warm tap water in the trays and on the sponge applicators. Not only is the warmth more comfortable it lowers resistance.

*Drink adequate amounts of water each day during treatment. Good hydration levels will help. Try to avoid excessive consumption of citric fruit drinks as these can increase resistance to current.