IONTOPHORESIS FOR HYPERHIDROSIS

What are the aims of this leaflet?

This leaflet has been written to help you understand more about iontophoresis for hyperhidrosis. It tells you what iontophoresis is, what the treatment process involves, the potential side effects and where you can get more information.

What is hyperhidrosis?

Hyperhidrosis means excessive sweating. It can be localised to one or several areas or can affect the whole body.

What is iontophoresis?

Iontophoresis (pronounced eye-on-toe-for-ree-sis) is a safe and effective treatment that can be used to reduce excessive sweating (hyperhidrosis) of the hands, feet, underarms and face (if the necessary attachment is available to go onto the machine).

What does the treatment process involve?

It involves using a machine to pass a weak electrical current through the affected areas of skin. This is done by placing the hands or feet in trays filled with water, or by holding water soaked sponge pads under the arms or wearing a water soaked face mask. A small current is then passed through the water. The current is passed one way for a fixed time and then reversed for the same amount of time. Initially a nurse would teach you how to do it and then you would do it yourself if you chose to do the treatment at home.

Are any medications used during the treatment process?

Generally, tap water is used. However, in some NHS dermatology centres a prescribed medicine called glycopyrrolate solution is added into the water filled trays or to the pads or mask. This medicine works by reducing the body’s sweat production at the treatment site. Side effects of glycopyrrolate are uncommon.
How does it work?

It is not known exactly why iontophoresis is successful and there are various theories including:
- The electric current and mineral particles in the water act together to thicken the outer layer of skin, thereby blocking the flow of sweat.
- The current may disrupt normal nerve transmission, which prevents the sweat duct from functioning.
- It decreases the pH value in the sweat gland, which makes it more acidic and reduces the amount of sweat produced.

Can anyone receive treatment?

You are not suitable to undertake iontophoresis treatment if:

You have a cardiac pacemaker or similar electronic device.
Caution is suggested if you have metal implants in the flow of the current (such as metal joint replacements). If the metal implant is not in the path of the current or in the immediate treatment area then there is no problem having iontophoresis treatment and you will be informed it is safe to commence treatment. Jewellery should be removed from around areas of treatment.

The risks of tap water iontophoresis in pregnancy are unknown. For this reason, most units in the UK do not advise treatment in pregnancy. It is safe to have iontophoresis if you are breastfeeding. The lower age limit for iontophoresis is 5 years and most children tolerate it well. However, performing treatments on children under 12 needs to be agreed with the doctor and this will be decided on a case by case basis.

Does it work for everyone?

After completing the initial recommended treatment schedule, up to 85% of people will find relief from their symptoms for the hands and feet. This is reduced to a 70% success rate for the underarms and probably less than this for the face. As success is related to the direct effect of the electrical current on the skin iontophoresis works best when higher currents are used, or the treatment is done for longer. Therefore, people may expect to have better success when performing this at home rather than a short course they might receive in the dermatology department.

Will it cure my sweating?

No. Unfortunately the effects are only short term and the treatment will need to be continued when the sweating returns. You will need to continue treatments (usually
once weekly or less) to keep the sweating under control, therefore buying a personal machine for home use is recommended if the treatment works for you.

**What does the treatment schedule involve?**

The initial treatment schedule usually involves two or three treatments per week over the course of 3-4 weeks. After this, if the treatment is successful then you will find temporary relief from your symptoms. You will then need top-up sessions as required on a weekly to monthly basis, which you can do at home if you purchase a machine. Tap water is sufficient and you will need a mains electricity supply.

**How long does each session take?**

Each session lasts for 20-30 minutes depending on the area to be treated. In some departments it is possible for the hands and feet to be treated at the same time.

**Is it painful?**

Everybody experiences pain differently. Some people find the treatment uncomfortable to start off with. Most people who use the treatment long term say that the treatment is not painful. You will be expected to feel a tingling ‘pins and needles’ sensation at the treatment site while the treatment is being given.

**What are the potential side effects?**

Side effects are unusual and short lived. Some people can experience:

- bruising or blisters if the intensity of the current is too high.
- a sensation of mild burning if the electrode is touched.
- a mild electric shock sensation if you remove your hands or feet from the trays mid-way through a treatment session.
- moderate thickening of the skin with frequent treatment, which can be managed by reducing the frequency of treatment.
- itchiness of the treated area for a short time after treatment.

**Where can I receive iontophoresis treatment?**

Some NHS dermatology departments are able to offer a trial of the treatment through a nurse-led clinic. The trial enables you to see if the treatment works successfully before you purchase your own iontophoresis machine for home use. The treatment can then be carried out by yourself, in the privacy of your own home without needing any medical supervision. A prescription would be required for glycopyrrolate if you were adding it to the water. Manufacturers will service the machines when required.
You can find various iontophoresis machine suppliers online, rent machines or buy second hand and details can be obtained from your dermatology department.

Where can I find out more about iontophoresis treatment?

If you want to know more about iontophoresis you should speak to your dermatologist or dermatology specialist nurse.

Web links to further information:

http://www.bad.org.uk/for-the-public/patient-information-leaflets/hyperhidrosis

http://dermnetnz.org/procedures/iontophoresis.html

http://patient.info/health/excessive-sweating-hyperhidrosis

https://iontophoresis.info

Links to patient support groups:

Hyperhidrosis Support Group
www.hyperhidrosisuk.org

International Hyperhidrosis Society
https://sweathelp.org/

For details of source materials used please contact the Clinical Standards Unit (clinicalstandards@bad.org.uk).

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: individual patient circumstances may differ, which might alter both the advice and course of therapy given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists’ Patient Information Lay Review Panel

BRITISH ASSOCIATION OF DERMATOLOGISTS
PATIENT INFORMATION LEAFLET
PRODUCED APRIL 2016
UPDATED JUNE 2019
REVIEW DATE JUNE 2022