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 explains 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 affect the whole body or certain areas.

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. It was first used to treat excessive sweating in 1936.

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, back or groin, or wearing a water-soaked mask on the face. A weak electrical current is then passed through the water to the skin. The current passes in one direction for a fixed time, and then flows in the opposite direction for the same amount of time. Initially a nurse would teach you how to do it and then if you wished, you could continue 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 from 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 block the flow of sweat at the outer layer of the skin.
- The current may disrupt normal nerve signals which tell the sweat glands to secrete sweat and then prevent 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?

It is not suitable for you to have iontophoresis treatment if you have a cardiac pacemaker or similar electronic device.

Caution is suggested if you have metal implants in areas that will be affected by 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. Jewellery should be removed from areas being treated.

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

Does it work for everyone?

After completing the initial recommended treatment schedule, up to 85% of people with symptoms in the hands and feet will find relief. 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 carried out for longer. Therefore, people may have better success when

performing this treatment at home regularly rather than a short course they may 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 sometimes less often) in the long term to keep the sweating under control.

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 hospital 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 can expect to feel a tingling 'pins and needles' sensation in the skin area where 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 your own home. A prescription would be required for glycopyrrolate if you are adding this 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 would like to know more about iontophoresis you should speak to your dermatologist or dermatology specialist nurse.

Web links to further information:

https://www.skinhealthinfo.org.uk/condition/hyperhidrosis/
http://dermnetnz.org/procedures/iontophoresis.html
http://patient.info/health/excessive-sweating-hyperhidrosis
https://hyperhidrosisuk.org/

Links to patient support groups:

Hyperhidrosis Support Group
www.hyperhidrosisuk.org

International Hyperhidrosis Society
https://sweathelp.org/

Please note that the British Association of Dermatologists provides web links to additional resources to help people access a range of information about their skin condition. The views expressed in these external resources may not be shared by the Association or its members.

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

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