

Functional electrical stimulation (FES) and skin care



Information for patients Mobility and Specialised Rehabilitation

Looking after your skin where the electrodes are positioned is very important when using electrical stimulation. This applies to all models of stimulator supplied by your therapist.

By following the information and advice provided below you can help to reduce the risk of skin irritation and soreness.

Applying the electrodes

1. Remove any skin creams from your skin where you place the electrodes to enable the stimulator to work effectively.
2. Wash your skin with warm water only (not soap) before placing the electrodes in their correct position. Alternatively use Dermal wash. Moistening the skin with water can make it easier for the stimulation to work effectively and enable you to achieve the desired movement using lower levels of stimulation.
3. When first applying the electrodes to your skin gradually build up the time they are on over a period of a week and look out for any skin changes.
4. Always remove the electrodes at night.

Can I shave my legs?

Some patients like to remove hairs from their skin. When the skin is 'wet' shaved the razor causes small scratches and this can encourage skin irritation when using the electrodes. It is advised never to use a razor but to use an electric shaver or scissors with care. If you want to use a razor then allow time for the skin to repair before applying the electrodes (e.g. 24 hours).

What about cuts, spots and grazes?

Cuts, spots or grazes where you position the electrodes can cause discomfort and prevent healing of the injured skin if the stimulator is used. It is important to allow the skin to completely heal. Alternatively find another place to position the electrodes which still achieves the desired movement.

My skin is red after using the electrodes; is this normal?

It is normal to have a slight redness of the skin under the electrodes. This is because your blood circulation has been affected by the use of the stimulator. The redness should fade after 1 – 2 hours once the electrodes have been removed. If the redness is still present after this time then you may be developing an allergic reaction to the electrodes. You should stop using the electrodes and stimulator and inform your therapist.

Skin irritation and allergy

Some people develop a skin irritation from the electrodes. This can happen any time after starting FES treatment. It can happen whether you have been using the electrodes for weeks, months or years. Experience has shown that it tends to happen in the summer months.

The irritation looks like a skin rash (little red spots). **It is important to stop using the electrodes over the irritated skin and inform your therapist.** You will be provided with hypoallergenic electrodes (blue) and must only use these in the future.

It is important to ensure the skin is totally healed before placing any of the electrodes in the same position. Hc45 or Eumovate can be used and bought over the counter.



Irritated skin



Blisters



Healed skin

If you do not allow the skin to heal or continue to use the electrodes when a skin rash appears then the rash can turn into blisters with broken skin which is painful if electrical stimulation is applied. Do not allow your skin to get into this state as it takes a while to heal and is avoidable.

If the skin rash is under one electrode only it is possible that the reaction is due to electro-chemical effects and you need to inform your therapists as adjustments can be made to your stimulator to help avoid this.

It is very rare for people to have to stop the use of the stimulator due to skin irritation as a solution to the problem is usually found.



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