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Electrical Stimulation in Wound Healing

What is electrical stimulation in wound healing?

- During electrical stimulation (also called E-stim), a small amount of electrical current is placed directly in your wound and the skin around it.
- This increases blood flow to the wound, which:
 - > brings oxygen and nutrients to the area to help with healing.
 - > takes away bacteria to keep the wound clean.
 - encourages granulation tissue to develop (helps make new tissue to close the wound).

How is it done?

- A health care provider will put an electrode (a special pad):
 - > in your wound on top of a wet bandage.

or

> on the healthy skin on either side of the wound.

You may feel tingling (like pins and needles) when the electrode is placed on the wound and the machine is turned on.

- The electrode is attached to a machine by a wire. The machine is used to send an electrical current to the wound.
- You should not feel any pain during the treatment.
- The treatment will last for about 45 to 60 minutes (1 hour). Treatments can be done up to 5 times a week.
- Your health care provider will watch you closely during your first treatment.

What will happen after the treatment?

- For a few hours after the treatment:
 - > The skin around the wound may be red or darker than usual.
 - > There may be pink fluid coming from the wound.
- You should **not** feel any pain. The area should not feel any different than it did before the treatment.

What are the possible risks?

- Risks are lower when electrical stimulation is done by a trained health care provider or technician.
- If the machine is set too high, it could cause pain and damage the skin under the electrode. Your health care provider will turn up the machine slowly to make sure you do not feel any pain. As they turn up the machine, they will ask you how you feel.
- A sudden surge of electrical current can cause pain, muscle spasms, and/or a burning or very strong stinging feeling under the electrode. **This is rare.** To stop this from happening, we check the machine, the wires, and the electrodes often to make sure they are working well.

If you do not feel comfortable at any time during your treatment, tell your health care provider. They will stop the treatment right away.

This pamphlet is for educational purposes only. It is not intended to replace the advice or professional judgment of a health care provider. The information may not apply to all situations. If you have any questions, please ask your health care provider.

> Find this pamphlet and all our patient resources here: https://library.nshealth.ca/Patients-Guides

Connect with a registered nurse in Nova Scotia any time: Call 811 or visit: https://811.novascotia.ca

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