

Client Health Education Resource

High Voltage Pulsed Current (HVPC) Wound Therapy

What is High Voltage Pulsed Current (HVPC)?

- HVPC uses a safe electrical current and a special silver dressing to conduct an electrical signal in the wound. This signal stimulates the growth of cells to heal and close a wound
- HVPC is also called Electrical Stimulation Therapy (EST), E-Stim or ES.

How does HVPC therapy work on my wound?

HVPC aids in wound healing by:

- Increasing local blood flow, oxygen and nutrients to the wound.
- Increasing the growth of granulation tissue to help close the wound.
- Reducing pain and swelling in the wound area.
- Decreasing the risk of infection.

Who sets up the HVPC therapy?

A Physiotherapist (PT) or Nurse trained in HVPC Wound Therapy will set up the therapy. The clinician will explain the treatment and ask for your consent prior to doing the therapy.

Once the therapy is set up and established, a health care professional, family member or caregiver, who has received instruction on how to connect and disconnect the electrode(s) from the silver dressing, can do the therapy as part of the dressing change.

How long and how often is the HVPC therapy session?

The therapy session is for 45–60 minutes and is done with each dressing change, usually 3 to 5 times a week. The therapy is continued until there are good signs of wound healing (wound is getting smaller, there is less drainage) or until the wound is closed.

Is there any discomfort during the HVPC therapy?

- You will feel mild tingling or pins and needles during the therapy session. This indicates that the electrical current is working.
- If you have any discomfort, talk to your PT/Nurse to lower the HVPC intensity level.
- After the HVPC therapy, there is a small chance that you may have redness or skin irritation where the electrodes were placed; if this lasts for more than 4 hours, tell the PT/Nurse.

How should I plan for my HVPC treatments?

With your PT and Nurse plan:

- The days and times for your HVPC treatments.
- When to have a shower (if allowed).
- When to take pain medication(s) if needed.

Contact Information:

Health Care Professional Name: _

Phone: _____

Email: _



Making better decisions together with patients and families

Created by: British Columbia Provincial Interprofessional Skin & Wound Committee

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