

Negative Pressure Wound Therapy (NPWT)

What is Negative Pressure Wound Therapy (NPWT)?

It is a therapeutic wound care management technique that uses a closed and controlled vacuum together with specialty foams to help promote wound healing.

Some examples of wounds suitable for NPWT include:



How does NPWT work?

It provides a mild suction effect which helps to:

- Reduce unhealthy tissue and chances of infection
- Provide a moist environment to facilitate the healing process of the wound
- Manage wound exudate and swelling
- Bring the wound edges together for a faster healing process
- Promote healthy tissue growth

What is used in NPWT?

There are different NPWT systems which can be used for different wounds.

Generally, some of the common medical tools needed include:

1. Battery-operated therapy unit
2. Suction tube
3. Foam to apply to the wound bed
4. Transparent dressing as drape to seal wound site and prevent leakage

The above list of medical tools/equipment should be brought along to your appointments.

Suitable conditions to use NPWT:

- Diabetic foot wounds
- Post amputation wounds



For any other wounds and/or conditions, the medical team will suggest using NPWT if deemed as suitable.

Non-suitable conditions to use NPWT:

Some examples of conditions that would be red flags and/or contraindications where NPWT should not be used include:

- A severe infection of the wound
- A bone infection whereby it is not yet being addressed
- Patients who have poor or inadequate blood supply



Some examples of how the NPWT system works include:



How to take care of your NPWT system at home:



1. Monitor for leakage alarms
2. Keep the NPWT machine and wound dressings dry.
3. Ensure the NPWT machine is kept upright.
4. Keep the NPWT machine charged at all times. Ensure that the battery icon on the NPWT machine is full before travelling. Bring along a charger if travelling more than 6-8 hours. (For dialysis patients, it is advisable to bring your charger along.)
5. Contact the vendor if your NPWT machine is faulty or has leakage and blockage issues.

Patients are advised to head to the nearest clinic/Emergency department if they experience any of the following symptoms:

- Fever (more than 38 degree Celsius)
- Pain, swelling, redness, or warmth
- Increased tenderness over the wound site
- Pus release or foul smell from the wound area
- A sudden increase of blood in the tube which could indicate signs of active bleeding. In the event of this happening, stop NPWT immediately.



What to expect when using NPWT?

- The period of use is determined by the medical team. NPWT could be applied for 4 to 8 weeks depending on the severity of the wound. Wounds could take several weeks or months to heal.
- The NPWT dressing should be changed every 3 to 4 days. The canister should be replaced once it is full.
- You will also need a wound sandal or suitable offloading device(s) to support your wound healing.

As a patient, how will NPWT make me feel?

There may be some mild discomfort/pulling sensation at the wound initially during the first round of application, but this feeling usually becomes negligible after several applications.



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