


Ohio Medical Negative Pressure Wound Therapy Clinical Guidelines

Precaution

 **CAUTION:** Federal law restricts the device to sale or distribution by an order of a licensed medical practitioner. This device should be used only by or under the direction of qualified medical personnel properly trained in medical suction techniques and in the operation of suction equipment. Improper use may cause injury. Read the operations manual prior to the operation of this device.

 **WARNING:** POSSIBLE EXPLOSION HAZARD IF USED IN THE PRESENCE OF FLAMMABLE ANESTHETICS.

Read and follow all user instructions and safety information for Ohio Medical Negative Pressure Wound Therapy (NPWT) products.

Prior to application of NPWT, it is the responsibility of the medical professional to properly assess the wound and to ensure that the proper course of treatment is being followed.

Use a contact dressing layer to completely cover any exposed tendons, ligaments, blood vessels, organs, any exposed bowel, nerves, and suture lines. Completely cover and protect prior to NPWT.

The product is not to be used in a draining fistula site or unexplored wound.

When dressing the wound, ensure that the gauze is properly saturated with normal saline before sealing the wound.

When dressing the wound, ensure that the moistened gauze does not extend to the healthy periwound tissue.

Do not use the MoblVac® pump in Magnetic Resonance Imaging (MRI), Computed Tomography (CT) Scanning, Electrocardiogram (EKG or ECG), or in Hyperbaric Oxygen (HBO) therapy. Disconnect the pump from the patient, leaving the dressing intact, while these therapies are in use.

Monitor patients for fluid loss and dehydration, especially patients with highly exudating wounds or large wounds.

The Ohio Medical MoblVac® NPWT system has not been studied for use with children.

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Indications

The MobilVac® NPWT pump is an AC/DC powered portable aspirator that provides negative pressure for the application of wound drainage. Negative Pressure Wound Therapy has been used with many types of wounds including:¹⁻⁷

- chronic burns
- pressure ulcers
- chronic wounds
- acute wounds
- surgical wounds
- neuropathic and diabetic wounds
- explored enterocutaneous fistulas
- leg ulcers
- traumatic wounds
- fasciotomy wounds from compartment syndrome

Benefits

The potential clinical benefits of NPWT include increasing local blood flow, accurate measurement of wound exudates, decreasing microbial bioburden, enhancing formation of granulation tissue, and wound contraction, and promoting epithelialization.⁷

Contraindications

- necrotic tissue with eschar present
- untreated osteomyelitis
- non-enteric or unexplored fistulas
- malignancy in wound
- exposed vasculature
- exposed nerves
- exposed anastomotic site
- exposed organs

Precautions: Patient risk factors/characteristics to consider before NPWT use

- patients at high risk for bleeding and hemorrhage
- patients on anticoagulants or platelet aggregation inhibitors (common types of blood thinners/antiplatelets include, but are not limited to: COUMADIN®, warfarin, heparin, LOVENOX®, aspirin, Plavix®, etc). If you are unsure, please check with your physician.
- patients with:
 - friable vessels and infected blood vessels
 - vascular anastomosis
 - infected wounds
 - osteomyelitis
 - exposed organs, vessels, nerves, tendon, and ligaments
 - sharp edges in the wound (i.e. bone fragments)
 - spinal cord injury (stimulation of sympathetic nervous system)
 - enteric fistulas

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- patients requiring:
 - MRI
 - Hyperbaric chamber
 - Defibrillation
- patient size and weight
- use near vagus nerve (bradycardia), such as neck wounds where the vagus nerve may be exposed
- circumferential dressing application in an extremity
- mode of therapy – intermittent versus continuous negative pressure
- position the device and tubing to avoid a trip hazard and to avoid the patient lying on the tubing, which could cause additional wounds
- do not apply skin prep wipes directly onto open wounds
- take extra precaution when NPWT is used on patients who are immunosuppressed (such as patients with HIV, undergoing chemotherapy, with transplants or on certain medications) or patients who are colonized with exotic organisms

Wound Preparation

1. Debride necrotic tissue from wound bed
2. Cover tendon, bone, vessels, or organs with several layers of non-adherent dressing
3. May apply skin barrier to periwound skin
4. Cover any area of intact skin that may come in contact with dressing

Pressure Levels

There are many studies in NPWT with pressures ranging from 60 to 125 mmHg. In studies using gauze-based NPWT, pressure settings of 60-80 mmHg are frequently cited as being less painful and minimizing risk of bleeding and tissue damage.⁸⁻¹⁰ This corresponds to a MobilVac® setting of 75 mmHg. Consult with your physician and facility protocol in setting pressure levels.

The MobilVac® system supports continuous and intermittent therapy. Continuous therapy is recommended for unstable structures such as chest wall or non-intact fascia, for patients with increased risk of bleeding, highly exudating wounds, and enteric fistulae. Intermittent therapy is considered after the first 48 hours in treating some wound types. The following guidelines are general recommendations. Consult with your physician and facility protocols.

Type of Wound	NPWT
Abdominal Wounds	Continuous therapy
Enteric Fistulas	Continuous therapy
Other NPWT-indicated wounds	Continuous therapy for first 48 hours. Consider intermittent therapy for duration if exudate is stabilized

Dressing Changes

Initial Application

The TruSeal Link™ dressing kits should be changed 48 hours after the initial application of therapy.

Subsequent Dressing Changes

If the patient is comfortable and if no leak is present, dressing changes should occur 2-3 times per week. The TruSeal Link™ dressing kits use Kerlix™ AMD™ antimicrobial gauze by Covidien, which has been clinically proven to maintain an active healing environment and reduce the risk of infection for up to 72 hours.¹¹⁻¹³

http://www.kendallamd.com/pdf/H-5884AMDvMRSA_VRE.pdf

http://www.tycohealth-ece.com/files/d0004/ty_at2ej8.pdf

Dressings should be checked at regular intervals.

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In the event of heavy drainage or drainage with sediment, more frequent dressing changes may be needed. Infected wounds may require more frequent dressing changes. Consult with your physician and facility protocol in determining dressing changes.

Ensure that all previous dressing materials are removed prior to new dressing application.

Dressing in Place without MoblVac® Therapy

If MoblVac Negative Pressure Wound Therapy is interrupted, the dressing may be left in place up to 72 hours from the initial application of that dressing, according to clinical documentation from the gauze dressing manufacturer.¹¹⁻¹³

http://www.kendallamd.com/pdf/H-5884AMDvMRSA_VRE.pdf

http://www.tycohealth-ece.com/files/d0004/ty_at2ej8.pdf

Wound Monitoring

1. Monitor for effective therapy resulting in:

- reduction in wound surface area
- reduction in wound depth
- reduction in undermining and tunneling
- reduction in drainage

2. Discomfort:

- apply non-adherent contact layer to wound bed before antimicrobial gauze
- investigate for underlying cause

3. Complications:

- Monitor patients for excessive bleeding. If bleeding is excessive, stop therapy. Call 911 (or local emergency number) and take emergency measures to control bleeding. (This is true if in the home, not in a hospital)
- Monitor patients for infection. If odor or clinical signs of infection are noted, contact the treating clinician immediately.

4. Battery and Canister:

- Check that the battery is charged
- The canister should be changed at least once a week or when 2/3 full
- Dispose of used canisters in accordance with local ordinances, regarding disposal of potentially infected or biohazardous materials
- Do not open canister

Refer to instructions on the back of the MoblVac® unit and with the dressing kit. For more information, call **866-985-NPWT (6798)** or visit www.OhioMedicalNPWT.com for the **MoblVac® Manual and dressing kit Instructions for Use.**

These guidelines reflect the clinical experiences and opinions of our consultants. Please contact Ohio Medical Corporation with additional questions.

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