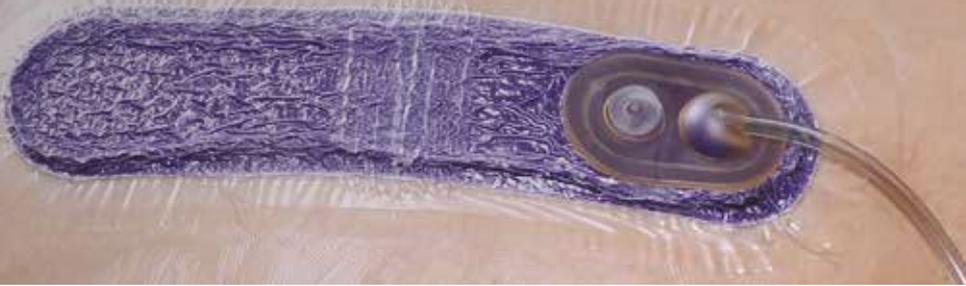


The top 10 things you need to know about closed incision negative pressure therapy.



Even when surgery is successful, the incision itself may develop post-operative complications. These complications have a significant impact on patients' lives, and healthcare costs. Discover how to select an appropriate closed incision negative pressure therapy system and read our top 10 guide on things you need to know before making a purchasing decision.

1

How closed incisional negative pressure wound therapy (ciNPWT) works.

ciNPWT consists of a closed, sealed system that applies suction (negative pressure) to the incision site. The incision is covered or packed with an open-cell foam or multi-layer absorbent dressing. Continuous negative pressure ranging from -50mmHg to -125mmHg is maintained by connective tubing between the dressing to a vacuum pump. This helps promote healing by maintaining a sealed environment, holding the incision edges together and removing exudate.^{1,2}

2

ciNPWT may help reduce overall costs associated with treating surgical site complications.

The use of ciNPWT is associated with cost savings due to lower incidence of surgical site infections and other complications. This in turn helps to reduce readmissions, reoperation, length of stay and antibiotic use. Some ciNPWT dressings do not need frequent changing, which helps to reduce the need for patients to remain in the hospital setting, freeing beds and reducing nursing time.³

3

The level of negative pressure impacts wound healing.

Early evidence into negative pressure as a wound therapy indicated that the application of a vacuum to a wound site increases blood flow, and therefore improves wound healing. The level at which negative pressure should be applied was also investigated and found that peak blood flow was observed at -125mmHg. Negative pressures above or below this pressure setting are less effective.⁴

4

ciNPWT devices may contain a canister or be canister-less.

Devices that contain a canister, draw fluid and infectious material away from the incision site and into a canister, which can be replaced. Devices with canisters are able to manage surgical incisions with high exudate levels. Canister-less devices hold fluid in the dressing and rely on fluid evaporation to manage exudate. Canister-less devices can manage incisions with lower exudate levels.³

5

Be cautious of ciNPWT devices that contain powerful magnets.

Some ciNPWT devices may contain magnets that can cause other medical devices in close proximity to fail, leading to serious harm including death. The ciNPWT device must be positioned away from medical devices that could be impacted by magnetic interference. These include but are not limited to pacemakers, insulin pumps, shunt valves, implantable cardioverter-defibrillator (ICD), neurostimulators, cochlear implants.⁵ If a device contains a powerful magnet, placement warnings will be detailed in the manufacturer's instructions or the device itself.

6

Device alerts are important to ensure continuous therapy.

Occasionally a device may develop an issue; such as a leak, blockage, low battery, or the dressing itself may require changing. It is important that the device alerts users to rectify the issue as soon as possible to ensure continuous care and efficacy. The optimal alert system will provide audio and visual alerts to notify all users, including those with audio or visual impairment.

7

Dressing changes

The number of dressing changes required for the duration of therapy will vary. Some systems will not require any dressing changes, others will require frequent changes, which could prevent earlier discharge. It is important to note that frequent dressing changes may increase overall costs of care: for the extra dressings themselves, and additional nursing time.

8

Dressing orientation

Some multilayer dressings must be oriented to ensure exudate remains away from the tubing port and prevent blockages. If this occurs, negative pressure will not be evenly distributed, and the dressing will require replacing. Foam dressings can be placed in any orientation.

9

Continued care from hospital to home

For greater flexibility, some ciNPWT devices can connect to in-hospital negative pressure wound therapy units. This provides clinicians with the ability to switch patients easily from a hospital device to portable device that can be used in a home setting, without changing the dressing.

10

Not all ciNPWT devices are clinically proven

Some ciNPWT devices available are not supported by clinical evidence and therefore remain unproven. It is important to select a therapy with robust clinical evidence to support efficacy, and cost effectiveness.

References

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