

## Do Incisional Negative-Pressure Wound Dressings Help Improve Wound Healing Outcomes in Posterior Spinal Surgeries?

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Categories: Neurosurgery, Quality Improvement, Trauma Keywords: closed incisional negative pressure wound therapy, spinal surgery infection prophylaxis, delayed wound healing

How to cite this abstract

Rahmathulla G, Pafford R, Tavanaiepour K, et al. (July 25, 2021) Do Incisional Negative-Pressure Wound Dressings Help Improve Wound Healing Outcomes in Posterior Spinal Surgeries? . Cureus 13(7): a574

## Abstract

Objective: Spine and spinal cord injuries are devastating life altering events. Surgery is undertaken with a goal of decompressing neural structures, attempting to re-align spinal anatomy and maintaining this alignment with surgical stabilization. A number of these procedures involve posterior cervical, thoracic and lumbar approached involving multiple levels, with a majority of them being open spinal procedures. At our Institution we have been using Negative-Pressure wound therapy as a primary post-operative dressing since 2016. Negative-pressure wound therapy as a primary dressing is being increasingly used with a goal of decreasing infection and dehiscence rates but recent literature is limited.

Materials and methods: We retrospectively reviewed our patients who underwent surgery having posterior open multi-level arthrodesis in the cervical, thoracic and lumbar spine following spine trauma. 30 and 90-day outcomes were evaluated for infection, dehiscence, need for out-patient wound care .

Results: The experience over time has been positive and we discuss our preliminary data and nuances in the use and care of these patients.

Conclusions: Negative-Pressure wound dressings if used appropriately add value to reduction of wound dehiscence rates and infections.

Open Access Abstract Published 07/25/2021

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Distributed under Creative Commons CC-BY 4.0 Learning Objective: Illustrate technical utilization of Negative-Pressure wound dressings for posterior spinal surgery