



Single Paravertebral Injection for Acute Thoracic Herpes Zoster

SCIENCE

[Clinical Research](#)

Key Take-Away:

- This study is designed to overcome the side effects appeared in previous studies, hence suggested analgesic equivalence between paravertebral blockade and epidural analgesia.
- Paravertebral block (PVB) is effective in treating acute and chronic pain, especially of unilateral origin from the chest and abdomen.

The concomitant inflammation of the peripheral nerve and skin damage is supposed to be responsible for the acute pain in patients with herpes zoster (HZ) and the area affected can be extremely painful, which exacerbates by movement or contact. During healing, the crusts fall away, leaving behind pink scars of rash that gradually become hypo-pigmented and atrophic.

ABSTRACT:

Background:

The concomitant inflammation of the peripheral nerve and skin damage is supposed to be responsible for the acute pain in patients with herpes zoster (HZ) and the area affected can be extremely painful, which exacerbates by movement or contact. During healing, the crusts fall away, leaving behind pink scars of rash that gradually become hypo-pigmented and atrophic.

Paravertebral block (PVB) is effective in treating acute and chronic pain, especially of unilateral origin from the chest and abdomen.

Rationale behind research

- i. Previous reports described the use of PVB in acute HZ pain, but none was randomized, double-blinded, or evaluated the effect of the block on the duration of eruptive stage

• Objective

To evaluate the efficacy of single paravertebral injection on acute HZ pain, duration of eruptive stage, and the incidence of PHN

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Methods:



Study outcomes

- Reduction in pain severity was assessed using visual analog scale (VAS)
- Time to pain resolution, skin eruption healing and incidence of persistent postherpetic pain were reported

• Time points



- **Efficacy:** Baseline and 1 week

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Results:



Baseline: Treatment groups were well balanced with no significant baseline differences

- Significantly shorter duration of pain was noticed in the active group compared to placebo (24.6 [23.7] vs. 35.9 [29.1] days, respectively, $P = 0.013$)
- Shorter duration of herpetic eruption and rapid skin healing were reported in the active group (23.3 [7.0] vs. 31.2 [6.7] days, $P < 0.001$)
- At 3 month, incidence of PHN was comparable in both groups
- At 6 months, lower incidence of PHN was encountered in active group (5.7% vs. 16.2%, $P = 0.048$)

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Conclusion:

The study reveals that a single PVB using local anesthetic, steroid, in combination with antiviral therapy early in the course of acute thoracic HZ, is a safe and effective treatment modality. It shortens the duration of pain, skin eruption and reduces the incidence of PHN.

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Therapeutic, Paravertebral Block (PVB), Pain, Nerves, Skin, Local Anesthetic, Steroid, Efficacy, Visual Analog Scale (VAS)