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#### **LETTER**

# A Response to: Letter to the Editor Regarding "Determining the Definitive Time Criterion for Postherpetic Neuralgia Using Infrared Thermographic Imaging"

Woong Ki Han · HyunHee Cho · Francis Sahngun Nahm 🕞

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**Keywords:** Herpes zoster; Inflammation; Neuralgia, postherpetic; Pathophysiology; ROC curve; Skin

#### **Key Summary Points**

Infrared thermographic image analysis showed that the transition of skin temperature from warm to cold occurs 12 weeks after herpes zoster onset (95% confidence interval 11–15 weeks, area under the receiver operating curve 0.901).

These findings serve as a theoretical basis for the timing definition of postherpetic neuralgia.

This is a response article to: Letter to the Editor Regarding "Determining the Definitive Time Criterion for Postherpetic Neuralgia Using Infrared Thermographic Imaging."

W. K. Han Daeheal Pain Clinic, Seoul, Republic of Korea

 $H.\ Cho\cdot F.\ S.\ Nahm$  Department of Anesthesiology and Pain Medicine, Seoul National University Bundang Hospital, Seoul, South Korea

F. S. Nahm (⊠)

Department of Anesthesiology and Pain Medicine, Seoul National University College of Medicine, 103 Daehak-ro, Jongno-gu, Seoul 03080, Republic of Korea

e-mail: hiitsme@snubh.org

Dear Editor,

We would like to thank Dr. Jiaying Lu and colleagues for their interest and constructive comments on our article "Determining the definitive time criterion for postherpetic neuralgia using infrared thermographic imaging" [1]. Below are our detailed replies to each of the comments.

First, we included patients having zoster-related pain only in the craniocervical and

thoracic regions, although, of course, herpes zoster can also affect the lumbosacral regions. A previous study comprising 1414 patients with postherpetic neuralgia (PHN) reported the most frequently affected sites to be the thoracic (52.9%) and craniocervical (30.1%) areas, whereas a mere 16.8% of the patients experienced PHN in the lumbosacral regions, and an estimated 0.1% of the cases were considered to be zoster sine herpete [2]. Therefore, we believe the patients included in this study represent the majority of patients with PHN. In addition, to measure skin temperature in the lumbosacral area, the patients must undress by completely removing their lower garments and underwear, which may cause patient privacy issues and potential patient embarrassment. For all the above-mentioned reasons, we only assessed the patients with zoster-related pain in the craniocervical and thoracic dermatomes. In addition, we do not think that the zoster-related pathophysiology differs depending on the affected site. In fact, our study found the timepoint when the skin inflammation reactions ends to be similar in the craniocervical and thoracic areas.

Second, we included only the patients who reported pain that could not be explained by causes other than zoster-related pain in the affected site. Therefore, it was not necessary to exclude patients having pain from complex regional pain syndrome, neuropathic pain, headache, or myofascial pain. We should have described it in detail in the original paper.

We appreciate the points raised by Dr. Jiaying Lu and colleagues. We hope that our knowledge in medicine will advance through discussion of research.

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*Disclosures.* Woong Ki Han, HyunHee Cho and Francis Sahngun Nahm declare that they have no conflict of interest.

Compliance with Ethics Guidelines. This article is based on the previous study and does not contain any new study with human participants or animals performed by any of the authors.

**Data Availability.** Data sharing is not applicable as no datasets were generated or analyzed during the current study.

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