

Postherpetic abdominal pseudohernia: A diagnostic pitfall

Yu Yagi MD | Takashi Matono MD | Kenichi Nakamura MD | Hiroshi Imura MD, PhD

Department of General Internal Medicine, Iizuka Hospital, Fukuoka, Japan

Correspondence

Takashi Matono, Department of General Internal Medicine, Iizuka Hospital, Fukuoka, Japan.

Email: tmatonoh1@aih-net.com

KEYWORDS: hospital general medicine, infection, infectious diseases, internal medicine

A previously healthy 68-year-old man presented with a 3-day history of multiple painful erythematous eruptions on his left abdomen. We diagnosed him with herpes zoster infection involving the left T11 dermatome and administered oral valacyclovir. At 6 days after the symptoms' onset, a left abdominal wall protrusion without tenderness appeared. The abdominal bulge became more prominent in the standing position (Figure 1A) and disappeared in the supine position. Abdominal ultrasound showed no abnormalities. We diagnosed him with postherpetic abdominal pseudohernia. The pseudohernia subsided completely 3 months after the onset without any interventions or complications (eg, constipation or ileus) (Figure 1B).

Herpes zoster is a viral infection of the dorsal-root ganglia and sensory-nerve fibers clinically characterized by unilateral vesicular eruption of the skin and painful sensory changes with a dermatomal distribution. The sensory abnormality is a predominant symptom of herpes zoster virus infection, whereas, motor neuropathy can also result from the infection. Taylor reported the first case with abdominal paresis related to segmental zoster in 1896.¹ The postherpetic

abdominal pseudohernia is a rare complication that occurs in 3%-5% of patients with herpes zoster.² The pathogenesis of muscle weakness is thought to be due to direct viral spread from the dorsal-root ganglion and sensory-nerve fibers to the ventral horn cells and motor nerve roots;³⁻⁵ therefore, electromyography is useful for confirming a diagnosis of pseudohernia.⁶ The reported time of onset from skin eruption to pseudohernia is 1-8 (mean, 3.5) weeks and T11 is the predominantly affected dermatome followed by T12 and T10.⁵ The prognosis is said to be generally good. However, full clinical recovery rate varied among previous studies, ranging from 55% to 78% of patients with pseudohernia; that is, the remaining 22%-45% of patients partially recovered or did not recover.^{4,6} Furthermore, the symptoms may be persistent with the median recovery time being 6.8 (range, 1.5-12) months.⁵ The most common complication of pseudohernia is constipation;⁵ however, more severe complications (eg, paralytic ileus and ADL dysfunction with gait disturbance) have also been reported.⁶ Nevertheless, the case with gait disturbance successfully responded to long-term systematic rehabilitation approach.⁶

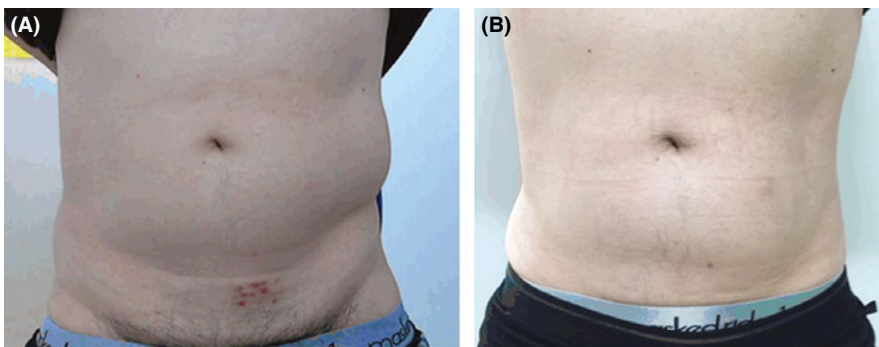


FIGURE 1 A, The left abdominal wall protrusion became more prominent in the standing position. B, The left abdominal wall protrusion disappeared 3 mo after the onset

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

© 2017 The Authors. *Journal of General and Family Medicine* published by John Wiley & Sons Australia, Ltd on behalf of Japan Primary Care Association.

Middle-aged or elderly patients with an abdominal bulge, particularly affecting the area around the T10-12 dermatomes, should be checked for a history of herpes zoster infection. Recognition of this unfamiliar pseudohermia is important for preventing unnecessary diagnostic studies and surgical intervention under the mistaken diagnosis of an abdominal wall hernia. Close observation and waiting until complete recovery are warranted considering the self-resolving nature of the disease and its favorable prognosis.

CONFLICT OF INTERESTS

The authors have stated explicitly that there are no conflicts of interest in connection with this article.

REFERENCES

1. Taryor F, Mamsel RE. A case of shingles followed by paralysis of the abdominal muscle. *Guy's Hosp Rep.* 1896;52:37-43.
2. Tagg NT, Tsao JW. Abdominal pseudohermia due to herpes zoster. *N Engl J Med.* 2006;355:e1.
3. Hung CT, Wang WM. Postherpetic pseudohermia. *CMAJ.* 2012;184:E202.
4. Vethanayagam M, Senthilkumar S, Subha KC, Rajagopalan R, Bhaskaran R. Abdominal pseudo hernia: a rare sequelae of complicated herpes zoster. *Int J Adv Med* 2015;2:278-81.
5. Chernev I, Dado D. Segmental zoster abdominal paresis (zoster pseudohermia): a review of the literature. *PM R.* 2013;5:786-90.
6. Tashiro S, Akaboshi K, Kobayashi Y, Mori T, Nagata M, Liu M. Herpes zoster-induced trunk muscle paresis presenting with abdominal wall pseudohermia, scoliosis, and gait disturbance and its rehabilitation: a case report. *Arch Phys Med Rehabil.* 2010;91:321-5.

How to cite this article: Yagi Y, Matono T, Nakamura K, Imura H. Postherpetic abdominal pseudohermia: A diagnostic pitfall. *J Gen Fam Med.* 2018;19:36-37. <https://doi.org/10.1002/jgf2.147>