Muscle weakness related to herpes zoster

Xiao Ke Liu MD, Jun Li MD

■ Cite as: *CMAJ* 2018 January 22;190:E81. doi: 10.1503/cmaj.171209

A 57-year-old man with a six-week history of herpes zoster in the left T11–T12 dermatomes presented to the dermatology department with a painful, progressive bulge in his left flank. The pain was due to postherpetic neuralgia. The bulge was more prominent on standing, coughing and straining. After onset of herpes zoster, he completed a seven-day course of valacyclovir. A review of systems was unremarkable.

On physical examination, we found a reducible protrusion in the left flank with several red to light brown macules and scars on the overlying skin (Figure 1A, 1B and 1C). Abdominal computed tomography at L3, which was the level of muscle weakness, did not show the presence of an existing hernia, mass or accumulation of fluid in the abdominal cavity (Figure 1D).

We sent the patient for electromyography that showed acute denervation changes in the T11–T12 distribution. Nerve conduction was normal in the dermatomes above and below the affected areas. We diagnosed a postherpetic pseudohernia. After three months, the bulge had improved but not resolved completely.

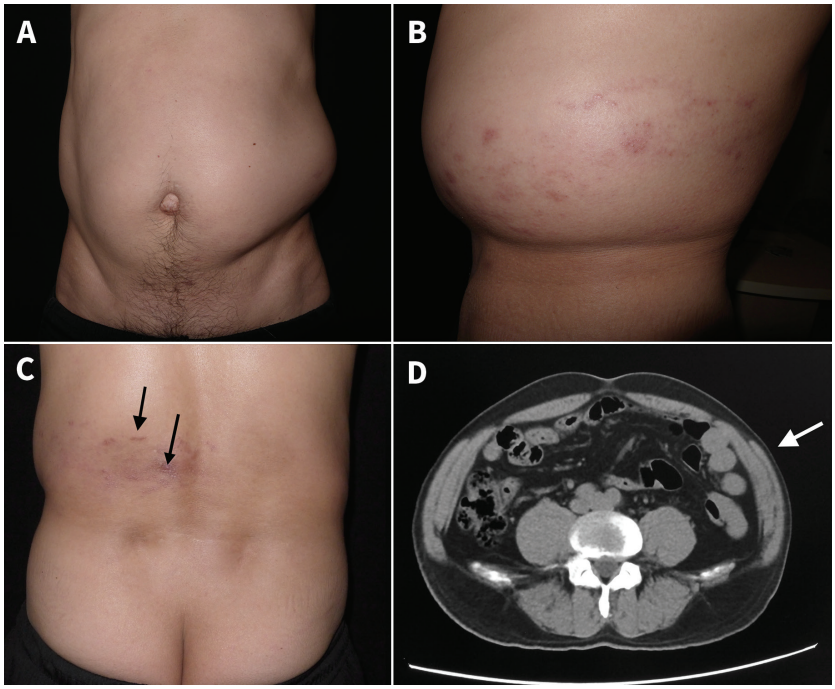

Figure 1: (A)–(C) A reducible protrusion in the left flank with several red to light brown macules and scars on the overlying skin in a 57-year-old man with a six-week history of herpes zoster in the left T11–T12 dermatomes. (D) Computed tomography at L3 showed no abnormality in the left lower abdominal wall in the region of the psuedohernia (arrow) compared with the right.

Muscle weakness related to herpes zoster represents a protrusion of the abdominal wall without an actual defect in the muscle. It can be observed in unilateral paralysis of abdominal muscles. Classically, reactivation of herpes zoster infection affects sensory nerve roots; however, it may extend to motor involvement, which can include paresis of diaphragmatic, upper and lower limb or abdominal musculature.[1] The prevalence of motor involvement is about 0.17% among patients with herpes zoster.[2] Abdominal or flank bulges typically occur within two to seven weeks after onset of skin eruptions.[3] Typically, pseudohernia after herpes zoster will resolve in most patients within one year.[4]

References

1. Flamholc L. Neurological complications in herpes zoster. *Scand J Infect Dis Suppl* 1996;100:35-40.
2. Giuliani A, Galati G, Parisi L, et al. Postherpetic paresis mimicking an abdominal herniation. *Acta Derm Venereol* 2006;86:73-4.
3. Dobrev H, Atanassova P, Sirakov V. Postherpetic abdominal-wall pseudohernia. *Clin Exp Dermatol* 2008;33:677-8.
4. Hung CT, Wang WM. Postherpetic pseudohernia. *CMAJ* 2012;184:E202.

Competing interests: None declared.

This article has been peer reviewed.

The authors have obtained patient consent.

Affiliation: Department of Dermatology, Peking Union Medical College Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China

Correspondence to: Jun Li, lijun35@hotmail.com