

**Case Report**

## PHANTOM HERNIA –AN UNUSUAL COMPLICATION OF HERPES ZOSTER

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### ABSTRACT

Motor neuropathy is an uncommon complication that may follow herpes zoster. Half of the reported cases involve cranial nerves typically facial nerve, remaining cases affected nerves of extremities<sup>1</sup>. Interestingly, motor weakness of thoracic segments is strikingly rare. We report a new case of motor paresis following herpes zoster infection in the abdominal region in a 55yr old man who presented with swelling in the left lower abdomen. Recognition of this complication of zoster which is easily misdiagnosed as abdominal herniation is important for diagnosing this self limiting condition and avoiding unnecessary procedures.

**Keywords:** *Herpes Zoster, Motor Neuropathy, Segmental Motor Paresis, Phantom Hernia*

### INTRODUCTION

Herpes zoster or “shingles” infection is manifested by the appearance of a circumscribed vesicular eruption of the skin and mucous membrane in a dermatomal distribution. It occurs as a result of reactivation of the latent neurotropic virus in the dorsal root (Rakban *et al.*, 2000) and cranial nerve ganglia usually decades after resolution of varicella with higher incidence among elderly and immunocompromised patients. It is associated with inflammation of dorsal root ganglia of the involved segment causing cutaneous rash, radicular pain and sensory changes in one or two immediately contiguous dermatomes. However the virus spreads in to anterior horn cells, ventral roots, motor axons within the peripheral nerves causing motor paresis (Sharma *et al.*, 2001). The facial muscles and muscles innervated by cervical and lumbosacral nerve roots are commonly afflicted where as motor neuropathy of thoracic segment is a rare occurrence.

### CASES

A 55 yr old man presented with a swelling in the middle of left side of lower abdomen of one month duration. The swelling did not increase or decrease in size and shape afterwards. Its size increased on coughing, sneezing and defecating. The patient had a history of sudden appearance of vesicles over the swollen area 3 months back. These vesicles extended from the back to just below the umbilicus on the left side. These lesions were associated with shooting pain. Slowly these lesions healed in 3 weeks time leaving behind scars. The pain also subsided along with it. There is no record of treatment details for zoster. Patient was a known diabetic and was under control.



**Picture A: Shows the swelling (10X 7cms) Over T11 &T12 dermatomes-Left side**

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Dermatological examination revealed multiple healed scars of varying sizes and shapes on the left side over the T11 and T12 dermatomes extending from the back to the midline anteriorly just below the umbilicus. Abdominal reflex in the affected dermatomes absent.



Picture B: Shows the healed scars involving the same dermatomes



Picture C: Lateral view of abdomen showing the swelling over T11&T12 dermatomes

The swelling was 10 x 7 cms, present in T11 and T12 abdominal segment of affected left side. The swelling was skin coloured, soft, non tender, non cystic, non mobile with well defined sloping margins Impulse on cough present.

### DISCUSSION

W. Broadbent first described motor involvement in herpes zoster in 1866 (Siddalingappa and Lokanatha, 2006). Taylor in 1895 reported the first case of paralysis of the abdominal muscles following shingles (Siddalingappa and Lokanatha, 2006; Rakban *et al.*, 2000). Symptoms of focal muscle weakness develop within 2 to 3 weeks after the onset of skin eruption (Siddalingappa and Lokanatha, 2006). Its onset is abrupt occurring over hours or 1 to 2 days with no deterioration (Siddalingappa and Lokanatha, 2006). Herpes zoster paralysis has been described in the middle aged or elderly persons, patients with hematological malignancies, and immunocompromised patients (Ruiz *et al.*, 2007). Our patient had no history of immunodeficiency or any malignancy but the age 55yr was compatible with the epidemiology. Diagnosis was suspected by previous history of herpes zoster. Studies showed that prognosis is good with complete recovery in 55-75 % of patients with in 6-12 months of onset (Siddalingappa and Lokanatha, 2006; Molinero *et al.*, 2002) but some patients remain without complete recovery.

### Conclusion

Dermatologists, neurologists, general practitioners and surgeons should be aware of this complication of herpes zoster as this will help to avoid unnecessary lab investigations including sonography and CT in

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patients with selflimiting condition requiring only clinical followup. Post herpetic pseudohernia must be suspected when a patient develops signs and symptoms of motor dysfunction that coincides with or follow a herpes zoster eruption resulting in abdominal wall herniation.

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