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# **Cervical Radiculopathy Associated with Shingles Herpes Zoster Infection**

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# **Abstract**

Shingles is a viral infection that causes a painful rash. Although shingles can occur anywhere on your body, it most often appears as a single stripe of blisters that wraps around either the left or the right side of your torso. Shingles is caused by the varicella-zoster virus-the same virus that causes chickenpox. This case report discusses the case of a 43 year old man with concurrent cervical spine radiculopathy and herpes zoster shingles infection.

**Keywords:** Chiropractic; Radiculopathy; Manipulation; Spinal

## **Clinical Features**

A 43 year old man with left sided C6 radiculopathy was evaluated and treated for the clinical diagnosis of C5-C6 disc herniation. Ten days before seeking care he had received influenza and pneumococcal vaccinations while recovering from an upper respiratory tract infection. A week after vaccination, he noticed tingling, aching, and fatigue in his left arm [1-5]. A week later, a rash appeared on his left arm. This was diagnosed via Teledoc as shingles; ibuprofen was prescribed, as too much time had lapsed for antiviral medication (Figure 1).



Figure 1: Herpes zoster cutaneous rash.

# **Discussion**

Herpes zoster primarily affects the posterior root ganglia and sensorial nerve fibers causing vesicular skin eruptions, radicular pain, and loss of sensorial function along the distribution of the affected ganglion. Motor paresis with herpes zoster is easily diagnosed, but the diagnosis is complicated when motor weakness precedes the cutaneous lesions of shingles and its sensory symptoms [6-9].

#### Intervention and outcome

Chiropractic spinal manipulation using Cox distraction protocols for a C5-C6 disc herniation was given 5 times over a time period of 5 weeks. The patient's left arm pain resolved and 50% relief for his neck pain was noted with decreased left arm rash. Four spinal manipulations were given over the next 12 week period, resulting in 80% reduced neck pain, complete resolution of left arm pain, and faint herpetic rash. The patient stated he felt he had returned to his level of health before the incident.

### Conclusion

Concurrent upper extremity radicular pain accompanied by herpes zoster cutaneous rash is described. Chiropractic spinal manipulation using Cox spinal distraction protocols saw resolution of the patient's complaints.

Once considered to be an uncommon dual occurrence, radiculopathy and herpes zoster infection deserve clinical discussion and evaluation of treatment protocols. Disc herniation is an independent risk factor for primary activation or reactivation of varicella zoster virus leading to herpes zoster.

Pain, a prodromal manifestation of herpes zoster, may be mistaken for various disease conditions, leading to hasty unwise investigation, therapy and surgical interventions. There is a need to identify the prodrome and skin eruptions of herpes zoster so that early antiviral therapy can be started, especially in elderly individuals who are at a higher risk of developing post herpetic neuralgia. Zoster may be detected through serum or cerebrospinal fluid polymerase chain reaction DNA analysis in an acute idiopathic setting. Herpes zoster should be considered a differential diagnosis in acute pain of short duration on one side of the body with or without skin lesions.

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