

# The Roller Coaster Ride of Disseminated Varicella-Zoster Virus Disease in Inpatient Rehabilitation

Colton Hickman DO, Jessica Berry MD

University of Pittsburgh Medical Center, Department of Physical Medicine and Rehabilitation

## Case Diagnosis

70-year-old male with Disseminated Varicella-Zoster Virus (VZV).

## Case Description

A 70-year-old male presented to the hospital with fever, fatigue, constipation, back pain, progressive lower extremity weakness, and urinary retention. After undergoing numerous diagnostics studies stemming from a broad differential, he had a delayed diagnosis of VZV myelitis confirmed by MRI imaging and positive cerebral spinal fluid VZV PCR. The patient received treatment with IVIG, corticosteroids, and antiviral drugs with temporary stabilization of symptoms. Impairments at the time of inpatient rehabilitation admission included: paraplegia, sensory impairment, neurogenic bowel and bladder, cranial nerve palsies (VI and VII) and vision impairment. During his inpatient rehabilitation course, he had gradual functional decline with decreased tolerance to intensive therapies. Further work up revealed small scattered acute to early subacute infarcts within multiple vascular territories. Findings were consistent with VZV vasculopathy with progressive evolution caused by presumed VZV disease dissemination.

## Imaging



Image 1. Thoracic spine: Small discrete foci of cortical T2 hyperintensity and loss of volume which are consistent with small areas of demyelination.

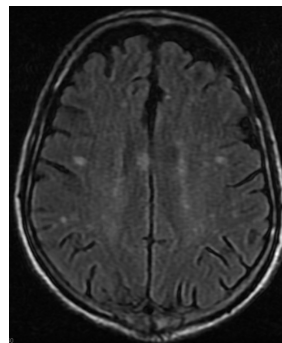


Image 2. Abnormal T2 signal, with superimposed additional chronic small vessel ischemic changes present throughout the periventricular and subcortical white matter.

## Discussion

There is a low prevalence of VZV disseminated disease (myelitis, vasculopathy, myeloencephalitis, etc.) highlighted in the medical literature. Much like some cancer diagnoses, this waxing and waning disease process can make rehabilitation efforts challenging due to a moving target of optimal function. It is important for rehabilitation providers to be aware of this disease process so they can guide patients and care givers about anticipated functional barriers with potential disease progression.

## Conclusion

Despite previous treatments for VZV myelitis, our 70-year-old patient experienced reactivation and protracted viral disease presenting a challenging rehabilitation effort for all those involved. Patients with VZV related diseases on inpatient rehabilitation require close neurologic monitoring for progression of disease and flexible therapy programs to achieve maximal functional outcomes.

## References

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