

Study finds shingles may be related to elevated risk of multiple sclerosis

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Taiwanese investigators have found that there can be a significantly higher risk of multiple sclerosis (MS) occurring in the year following a shingles, or herpes zoster, attack. The findings, which support a longheld view on how MS may develop, are published in The *Journal of Infectious Diseases* and now available online.

MS is an autoimmune disease that affects the brain and spinal cord, leading to inflammation and <u>nerve damage</u> as the body's <u>immune cells</u> attack the nervous system. Possible causes that may trigger the inflammation include environmental, genetic, and viral factors. One virus that has been associated with MS is varicella zoster virus, the cause of herpes zoster.

In a study conducted by Herng-Ching Lin, PhD, and colleagues at Taipei Medical University in Taiwan, 315,550 adults with herpes zoster and a control group of 946,650 subjects were tracked and then evaluated for MS occurrence during a one-year follow-up period. The control group was selected randomly from a pool of subjects who had not been diagnosed with herpes zoster or other viral diseases. After adjusting for monthly income and geographic region, the authors found that the group with herpes zoster had a 3.96 times higher risk of developing MS than the control group. The authors noted that this risk, although increased, was still low, as is the frequency of MS in general. The study also noted an interval of approximately 100 days between a herpes zoster event and occurrence of MS.



Although the study was limited almost entirely to Han Chinese adults, the large scope of this nationwide case-controlled study, 1.26 million sampled patients, provides strong <u>epidemiological evidence</u> for a possible role for herpes zoster in the development of MS. The authors also point out that MS has a lower prevalence in Asian compared to Western populations and, thus, it may be difficult to project their findings to other populations.

In an <u>accompanying editorial</u>, Teresa Corona, MD, and Jose Flores, MD, of the National Institute of Neurology and Neurosurgery in Mexico noted that "The evidence provided in this study...allows us to better understand the role of these viral factors as an MS risk among certain genetically susceptible individuals," and that the study should be corroborated in other parts of the world to help clarify the role of this and other viruses in MS.

More information:

Fast Facts:

There is epidemiological evidence that some herpes viruses may contribute to multiple sclerosis (MS) occurrence.

The rate of MS prevalence varies by geographical location and income. In this study, investigators found a significantly higher—but still low—risk for MS occurring in the year following a shingles, or herpes zoster, attack compared to a control population.

There is evidence that 30 percent of relapses in MS patients may be associated with an infectious disease.

Provided by Infectious Diseases Society of America



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