

# Low Vitamin D and Spinal Cord Disease

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Chicago, IL - infoZine - Vitamin D is a steroid vitamin that promotes the intestinal absorption and [metabolism](#) of [calcium](#) and [phosphorus](#). In recent years, low levels of vitamin D have been linked to a variety of autoimmune conditions, including [multiple sclerosis](#) (MS, a disease of the [central nervous system](#) marked by numbness, weakness, loss of muscle coordination, and problems with vision, speech, and bladder control). However, the importance of vitamin D in monophasic or recurrent non-MS spinal cord diseases including transverse myelitis and neuromyelitis optica is unknown, according to background information to a study published Online First by Archives of Neurology, one of the JAMA/Archives journals. Transverse myelitis (TM) is a disease of the spinal cord in which there is involvement of the [myelin](#) sheath that protects nerve fibers; symptoms include back pain and weakness in the legs. Neuromyelitis optica (NMO) is a disease of the central nervous system that affects the optic nerves and spinal cord.

Maureen A. Mealy, R.N., B.S.N., of Johns Hopkins University, Baltimore, and colleagues investigated the association between low serum vitamin D levels and recurrent spinal cord disease. They analyzed data on vitamin D levels among 77 patients with monophasic (having only one phase or stage) and recurrent inflammatory diseases of the spinal cord, adjusting for season, age, sex, and race.

The study found that vitamin D levels were significantly lower in patients who developed recurrent spinal cord disease. "Our findings suggest that there may be an association between lower total [25-hydroxyvitamin D](#) levels in patients with recurrent TM/NMO/NMO spectrum disorders as compared with their counterparts with monophasic disease," the authors report.

"This is consistent with other recurrent autoimmune conditions and points to a common link between low vitamin D levels and immunologic dysregulation," they write.

The authors suggest that future studies are needed to further assess the relationship between vitamin D and recurrent spinal cord disease. "This study provides a basis for a prospective trial of measuring [25-hydroxyvitamin D](#) levels in these patient populations and assessing the influence of vitamin D supplementation on the frequency of relapses in those with recurrent inflammatory spinal cord disease," they conclude.

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