

## **Is the central vein sign really helpful in differentiating MS from other white matter disease? - Host**

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MS cannot be diagnosed in the absence of clinical signs and symptoms of a typical demyelinating syndrome. However, there are many scenarios where signs and symptoms of disease are atypical and there is need of reliable ancillary tests to help secure an accurate diagnosis. The white matter appearance of MS lesions is not specific to MS and such changes can occur with numerous other entities, which can often lead to misdiagnosis. The pathology of an MS lesion is the hallmark perivenous inflammation. MRI is now sensitive enough to pick up the appearance of a vessel in the midst of a white matter lesion, especially using new MRI techniques such as SWI. How specific is the appearance of a "central vein" for a white matter lesion due to MS? Can it really lead to less misdiagnosis? How often do MS lesions lack the central vein sign? If sensitivity and specificity are really high, then why is it now not part of every standard MRI regimen for diagnosing MS?