Bibliographic Cite	PMID Link	Literature Type	Level of Evidence	Purpose	Population	Intervention and Outcome Measures	Results/ Recommendations	Study Limitiations
Rahn AC, Kopke S, Stellmann JP, et al. Magnetic resonance imaging as a prognostic disability marker in clinically isolated syndrome: A systematic review. Acta Neurol Scand. 2019; 139(1):18-32.	30091223	Systematic Review	Moderate level of evidence	To assess the prognostic value of MRI for disability following a CIS.	A total of 13 studies were selected for inclusion. Mean patient age at baseline ranged from 29 to 32 years across the cohorts, with more women (approx. 67% overall).	Authors systematically searched MEDLINE and EMBASE. Cohort studies were selected if they reported associations of MRI and disability following a CIS, included at least 50 people with a CIS at baseline, had at least 5 years of follow-up and obtained at least one structural MRI measurement (T1 lesions, T2 lesions, T1 contrast-enhancing lesions or brain atrophy). We assessed the studies for quality and rated the completeness of MRI reporting. The primary outcome was disability progression assessed by the expanded disability status scale (EDSS)16 in association with the prognostic factor (MRI).Secondary outcome measures were assessment of transition from a CIS to clinically definite MS (CDMS), the development of secondary progressive MS (SPMS) and mortality.	T2 brain lesion number determined soon after the occurrence of a CIS was associated with disability progression after 5-7 years, with an increased risk when 10 or more lesions were present. Infratentorial lesions were also associated with a higher risk of subsequent disability. The number and distribution of MRI-visible lesions soon after a CIS are associated with disability later on, and may offer additional useful information when making treatment decisions in people with early MS. Further work is required to determine whether other measures have a higher predictive potential.	With regard to the main MRI measures, these were not always presented in the same way (e.g., T2 lesion numbers were often summed up in different categories), which made a direct comparison difficult. The main clinical disability measure for these studies was the EDSS score, and while this gives a clear assessment of walking function (and so lower limb motor function), it undervalues other causes of disability, such as cognitive impairments. Further, a publication bias could have influenced the results as studies reporting negative results might have not been published. As the authors did not search systematically for grey literature, they could have missed relevant studies.

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