National Multiple Sclerosis Society

TipSheet

ECTRIMS EUROPEAN COMMITTEE FOR TREATMENT AND RESEARCH IN MULTIPLE SCLEROSIS

2010 Revised McDonald Diagnostic Criteria for MS[1]

Diagnosis of MS requires elimination of more likely diagnoses and demonstration of dissemination of lesions in space and time

CLINICAL (ATTACKS)	LESIONS	ADDITIONAL CRITERIA TO MAKE DX
2 or more	Objective clinical evidence of 2 or more lesions or objective clinical evidence of 1 lesion with reasonable historical evidence of a prior attack	None. Clinical evidence alone will suffice; additional evidence desirable but must be consistent with MS
2 or more	Objective clinical evidence of 1 lesion	Dissemination in space, demonstrated by ➢ ≥ 1T2 lesion in at least two MS typical CNS regions (periventricular, juxtacortical, infratorial, spinal cord); **OR** ➢ Await further clinical attack implicating a different CNS site
1	Objective clinical evidence of 2 or more lesions	Dissemination in time, demonstrated by ➢ Simultaneous asymptomatic contrast-enhancing and non-enhancing lesions at any time ; **OR** ➢ A new T2 and/or contrast-enhancing lesions(s) on follow-up MRI, irrespective of its timing; **OR** ➢ Await a second clinical attack
1	Objective clinical evidence of 1 lesion	Dissemination in space, demonstrated by ➢ ≥ 1T2 lesion in at least two MS typical CNS regions (periventricular, juxtacortical, infratentorial, spinal cord); **OR** ➢ Await further clinical attack implicating a different CNS site **AND** Dissemination in time, demonstrated by ➢ Simultaneous asymptomatic contrast-enhancing and non-enhancing lesions at any time; **OR** ➢ A new T2 and/or contrast-enhancing lesions(s) on follow-up MIR, irrespective of its timing; **OR** ➢ Await a second clinical attack
0 (progression from onset)		One year of disease progression (retrospective or prospective) **AND** at least 2 out of 3 criteria: ➢ Dissemination in space in the brain based on ≥1 T2 lesion in periventricular, juxtacortical or infratentorial regions; ➢ Dissemination in space in the spinal cord based on ≥2 T2 lesions; **OR** ➢ Positive CSF

[1]Polman C et al. *Annals of Neurology* (2011;69:292-302) http://onlinelibrary.wiley.com/doi/10.1002/ana.22366/abstract

Further Information on Diagnosing MS[1]

What Is An Attack?

- Neurological disturbance of kind seen in MS
- Subjective report or objective observation
- At least 24 hours duration in absence of fever or infection
- Excludes pseudoattacks, single paroxysmal symptoms (multiple episodes of paroxysmal symptoms occurring over 24 hours or more are acceptable as evidence)
- Some historical events with symptoms and pattern typical for MS can provide reasonable evidence of previous demyelinating event(s), even in the absence of objective findings

Determining Time Between Attacks

- 30 days between onset of event 1 and onset of event 2

What Provides Evidence for Dissemination in Space?[2]

≥ 1 T2 lesion in at least two out of four areas of the CNS: periventricular, juxtacortical, infratentorial, or spinal cord

- Gadolinium enhancement of lesions is not required for DIS
- If a subject has a brainstem or spinal cord syndrome, the symptomatic lesions are excluded and do not contribute to lesion count

What Provides MRI Evidence of Dissemination in Time?[3]

- A new T2 and/or gadolinium-enhancing lesion(s) on follow-up MRI, with reference to a baseline scan, irrespective of the timing of the baseline MRI **OR**
- Simultaneous presence of asymptomatic gadolinium-enhancing and non-enhancing lesions at any time

What is Positive CSF?

Oligoclonal IgG bands in CSF (and not serum) ***or*** elevated IgG index

[1]Polman C et al. *Annals of Neurology* (2011;69:292-302) http://onlinelibrary.wiley.com/doi/10.1002/ana.22366/abstract
[2] Swanton KL et al. *Lancet Neurology* 2007;6:677-686 /Swanton KL et al. *J Neurol Neurosurg Psychiatry* 2006;77:830-833.
[3] Montalban X, et al. *Neurology* 2010;74:427-434