

Tipsheet

2005 Revised McDonald Diagnostic Criteria for MS¹

What Is An Attack?

- Neurological disturbance of kind seen in MS
- Subjective report or objective observation
- 24 hours duration, minimum
- Excludes pseudoattacks, single paroxysmal episodes

Determining Time Between Attacks

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

What is a Positive MRI?^{2,3}

3 out of 4 of the following:

- 1 Gd-enhancing brain or cord lesion *or* 9 T2 hyperintense brain and/or cord lesions if there is no Gd-enhancing lesion
- 1 or more brain infratentorial or cord lesion
- 1 or more juxtacortical lesion
- 3 or more periventricular lesions

Note: Individual cord lesions can contribute along with individual brain lesions to reach required number of T2 lesions

What Provides MRI Evidence of Dissemination in Time?

- A Gd-enhancing lesion detected in a scan done at least 3 months after onset of initial clinical event at a site different from the initial event

or

- A new T2 lesion detected in a scan done at any time compared to a reference scan done at least 30 days after initial clinical event

What is Positive CSF?

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

What is Positive VEP?

Delayed but well-preserved wave form

The 2005 Revisions to the McDonald Diagnostic Criteria for MS¹

CLINICAL PRESENTATION	ADDITIONAL DATA NEEDED FOR MS DIAGNOSIS
2 or more attacks; objective clinical evidence of 2 or more lesions	<ul style="list-style-type: none"> • None
2 or more attacks; objective clinical evidence of 1 lesion	<ul style="list-style-type: none"> • Dissemination in space, demonstrated by: <ul style="list-style-type: none"> ➔ MRI OR ➔ 2 or more MRI detected lesions consistent with MS plus positive CSF OR ➔ Await further clinical attack implicating a different site
1 attack; objective clinical evidence of 2 or more lesions	<ul style="list-style-type: none"> • Dissemination in time, demonstrated by: <ul style="list-style-type: none"> ➔ MRI OR ➔ Second clinical attack
1 attack; objective clinical evidence of 1 lesion (monosymptomatic presentation; clinically isolated syndrome)	<ul style="list-style-type: none"> • Dissemination in space, demonstrated by: <ul style="list-style-type: none"> ➔ MRI OR ➔ 2 or more MRI-detected lesions consistent with MS plus positive CSF <u>AND</u> • Dissemination in time, demonstrated by: <ul style="list-style-type: none"> ➔ MRI OR ➔ Second clinical attack
Insidious neurological progression suggestive of MS	<ul style="list-style-type: none"> • One year of disease progression (retrospectively or prospectively determined) <u>AND</u> • Two out of three of the following: <ol style="list-style-type: none"> a. Positive brain MRI (9 T2 lesions or 4 or more T2 lesions with positive visual evoked potentials); b. Positive spinal cord MRI (two or more focal T2 lesions); c. Positive CSF

¹Polman et al. Diagnostic Criteria for Multiple Sclerosis: 2005 Revisions to the “McDonald” Criteria. *Ann Neurol.* (2005) 58:840-846.

²Barkhof et al. Comparison of MR imaging criteria at first presentation to predict conversion to clinically definite MS. *Brain* (1997) 120:2059-2069.

³Tintoré et al. Isolated demyelinating syndromes: comparison of different imaging criteria to predict conversion to clinically definite MS. *Am J Radiology* (2000) 21:702-706.