

Functional Systems Scores (FSS)

Kurtzke JF. Rating neurological impairment in multiple sclerosis: an expanded disability status scale. *Neurology* 1983; **33**: 1444-1452

Pyramidal Functions

<i>Score</i>	<i>Criteria</i>
0	Normal
1	Abnormal signs without disability
2	Minimal disability
3	Mild or moderate paraparesis or hemiparesis
4	Marked paraparesis or hemiparesis; moderate quadriparesis; or monoplegia
5	Paraplegia, hemiplegia, or marked tetraparesis
6	Quadriplegia

Cerebellar Functions

<i>Score</i>	<i>Criteria</i>
0	Normal
1	Abnormal signs without disability
2	Mild ataxia
3	Moderate truncal or limb ataxia
4	Severe ataxia, all limbs
5	Unable to perform coordinated movements due to ataxia
X	Used throughout after each number when weakness (grade 3 or more on pyramidal) interferes with testing

Sensory Functions

<i>Score</i>	<i>Criteria</i>
0	Normal
1	Vibration or figure-writing decrease only in one or two limbs
2	Mild decrease in touch or pain or position sense, and/or moderate decrease in vibration in one or two limbs; or vibratory (c/s figure-writing) decrease alone in three or four limbs

3	Moderate decrease in touch or pain or position sense, and/or essentially lost vibration in one or two limbs; or mild decrease in touch or pain and/or moderate decrease in all proprioceptive tests in three or four limbs
4	Marked decrease in touch or pain or loss of proprioception, alone or combined, in one or two limbs; or moderate decrease in touch or pain and/or severe proprioceptive decrease in more than two limbs
5	Loss (essentially) of sensation in one or two limbs; or moderate decrease in touch or pain and/or loss of proprioceptive for most of the body below the head
6	Sensation essentially lost below the head

Brainstem Functions

<i>Score</i>	<i>Criteria</i>
0	Normal
1	Signs only
2	Moderate nystagmus or other disability
3	Severe nystagmus, marked extraocular weakness, or moderate disability of other cranial nerves
4	Marked dysarthria or other marked disability
5	Inability to swallow or speak

Sphincter (Bowel and Bladder) Functions

<i>Score</i>	<i>Criteria</i>
0	Normal
1	Mild urinary hesitancy, urgency or retention
2	Moderate hesitancy, urgency, retention of bladder or bowel, or rare urinary incontinence
3	Frequent urinary incontinence
4	In need of almost complete constant catheterisation
5	Loss of bladder function

Visual Functions

<i>Score</i>	<i>Criteria</i>
0	Normal

1	Scotoma with visual acuity (corrected) better than 20/30
2	Worse eye with scotoma with maximal visual acuity (corrected) of 20/30 to 20/59
3	Worse eye with large scotoma, or moderate decrease in fields, but with maximal visual acuity (corrected) of 20-60 to 20-99
4	Worse eye with marked decrease in fields and maximal visual acuity (corrected) of 20/100-20/200; grade 3 plus maximal acuity of better eye 20/60 or less
5	Worse eye with maximal visual acuity (corrected) less than 20/200; grade 4 plus maximal acuity of better eye of 20/60 or less
6	Grade 5 plus maximal acuity of better eye of 20/60 or less
X	Added to grades 0 to 6 for presence of temporal pallor

Mental Functions

<i>Score</i>	<i>Criteria</i>
0	Normal
1	Mood alteration only (does not affect DSS score)
2	Mild decrease in mentation
3	Moderate decrease in mentation
4	Marked decrease in mentation (chronic brain syndrome-moderate)
5	Dementia or chronic brain syndrome-severe or incompetent

Other Functions

<i>Score</i>	<i>Criteria</i>
0	None
1	Any other neurologic findings attributed to MS (specify)