neurostatus scoring

Scoring Sheet for a standardised, quantified neurological examination and assessment of Kurtzke's Functional Systems and Expanded Disability Status Scale in Multiple Sclerosis

STUDY NAME

PERSONAL INFORMATION

Patient	
Date of Birth (04-Jun-1980)	– –
Centre Nr/Country	
Name of EDSS rater	
Date of Examination	– – 2 0

SYNOPSIS

1. Visual		[1]
2. Brainstem		
3. Pyramidal		
4. Cerebellar		
5. Sensory		
6. Bowel/Bladder		[1]
7. Cerebral		

Ambulation Score

EDSS Step

Signature

1. VISUAL (OPTIC) FUNCTIONS

OPTIC FUNCTIONS	OD	OS
Visual acuity ☐ CC ☐ SC		
Visual fields		

Scotoma		
* Disc pallor		
FUNCTIONAL SYSTEM SCORE	→	[1]

2. BRAINSTEM FUNCTIONS

CRANIAL NERVE EXAMINATION	
Extraocular movements (EOM) impairment	
Nystagmus	
Trigeminal damage	
Facial weakness	

Hearing loss	
Dysarthria	
Dysphagia	
Other cranial nerve functions	
FUNCTIONAL SYSTEM SCORE	

3. PYRAMIDAL FUNCTIONS

REFLEXES	R	><	L
Biceps			
Triceps			
Brachioradialis			
Knee			
Ankle			
Plantar response			
Cutaneous reflexes			
* Palmomental reflex			

LIMB STRENGTH	R	L
Deltoid		
Biceps		
Triceps		
Wrist/finger flexors		
Wrist/finger extensors		
Hip flexors		
Knee flexors		

Knee extensors		
Plantar flexion (feet/toes)		
Dorsiflexion (feet/toes)		
* Position test UE, pronation		
* Position test UE, downward drift		
* Position test LE, sinking		
* Able to lift only one leg at a time (grade in °)	°	°
* Walking on heels		
* Walking on toes		
* Hopping on one foot		
SPASTICITY		
Arms		
Legs		
Gait		
OVERALL MOTOR PERFORMANCE		
FUNCTIONAL SYSTEM SCORE		

CC = corrected
SC = without correction

* = optional part of the examination
[1] = converted FS Score

4. CEREBELLAR FUNCTIONS

CEREBELLAR EXAMINATION			Rapid alternating movements UE impairment		
Head tremor			Rapid alternating movements LE impairment		
Truncal ataxia			Tandem walking		
	R	L	Gait ataxia		
Tremor/dysmetria UE			Romberg test		
Tremor/dysmetria LE			Other, e. g. rebound		
			FUNCTIONAL SYSTEM SCORE		

5. SENSORY FUNCTIONS

SENSORY EXAMINATION	R	L	Position sense UE		
Superficial sensation UE			Position sense LE		
Superficial sensation trunk			* Lhermitte's sign		
Superficial sensation LE			* Paraesthesiae UE		
Vibration sense UE			* Paraesthesiae trunk		
Vibration sense LE			* Paraesthesiae LE		
			FUNCTIONAL SYSTEM SCORE		

6. BOWEL/ BLADDER FUNCTIONS

Urinary hesitancy/retention		Bowel dysfunction	
Urinary urgency/incontinence		* Sexual dysfunction	
Bladder catheterisation		FUNCTIONAL SYSTEM SCORE →	[1]

7. CEREBRAL FUNCTIONS

MENTAL STATUS EXAMINATION		Decrease in mentation	
° Depression		+ Fatigue	
° Euphoria		FUNCTIONAL SYSTEM SCORE	

AMBULATION

Distance reported by patient (in meters)		Assistance	
Time reported by patient (in minutes)		Distance measured (in meters)	
		AMBULATION SCORE	

* = optional part of the examination
[1] = converted FS Score
° Depression and Euphoria are not taken into consideration for FS and EDSS calculation.
+ Because fatigue is difficult to evaluate objectively, in some studies it does not contribute to the Cerebral FS score or EDSS step. Please adhere to the study's specific instructions.

UE = upper extremities
LE = lower extremities

Standardised Neurological Examination and Assessment of Kurtzke's Functional Systems and Expanded Disability Status Scale
Slightly modified from J.F. Kurtzke, Neurology 1983:33,1444-52