

TRUNK IMPAIRMENT SCALE

Appendix 2.

The Trunk Impairment Scale for People With Multiple Sclerosis

Starting position for all items: sitting, thighs horizontal and feet flat on support, knees 90° flexed, no back support, hands and forearms resting on the thighs. The subject gets 3 attempts for each item. The best performance is scored. The observer may give feedback between the tests. Instructions can be verbal and nonverbal (demonstration).

Item	Task Description	Score Description	Score	Remarks
Static Sitting Balance				
1.	Keep starting position for 10 s	Falls or needs arm support Maintains position for 10 s	0 2	If 0, total TIS score is 0
2.	Therapist crosses strongest leg over weakest leg, keep position for 10 s	Falls or needs arm support Maintains position for 10 s	0 2	
3.	Patient crosses strongest leg over weakest leg	Falls Needs arm support Displaces trunk >10 cm or assists with arm Moves without trunk or arm compensation	0 1 2 3	
			/7	
Dynamic Sitting Balance				
1.	Touch seat with right elbow, return to starting position (task achieved or not)	Does not reach seat, falls, or uses arm Touches seat without help	0 1	If 0, items 2+3 are also 0
2.	Repeat item 1 (evaluate trunk movement)	No appropriate trunk movement Appropriate trunk movement (shortening right side, lengthening left side)	0 1	If 0, item 3 is also 0
3.	Repeat item 1 (compensation strategies used or not)	Compensation used (arm, hip, knee, foot) No compensation strategy used	0 1	
4.	Touch seat with left elbow, return to starting position (task achieved or not)	Does not reach seat, falls, or uses arm Touches seat without help	0 1	If 0, items 5+6 are also 0
5.	Repeat item 4 (evaluate trunk movement)	No appropriate trunk movement Appropriate trunk movement (shortening left side, lengthening right side)	0 1	If 0, item 6 is also 0
6.	Repeat item 4 (compensation strategies used or not)	Compensation used (arm, hip, knee, foot) No compensatory strategy used	0 1	
7.	Lift right side of pelvis from seat, return to starting position (evaluate trunk movement)	No appropriate trunk movement Appropriate trunk movement (shortening right side, lengthening left side)	0 1	If 0, item 8 is also 0
8.	Repeat item 7 (compensation strategies used or not)	Compensation used (arm, hip, knee, foot) No compensation strategy used	0 1	
9.	Lift left side of pelvis from seat, return to starting position (evaluate trunk movement)	No appropriate trunk movement Appropriate trunk movement (shortening left side, lengthening right side)	0 1	If 0, item 10 is also 0
10.	Repeat item 9 (compensation strategies used or not)	Compensation used (arm, hip, knee, foot) No compensation strategy used	0 1	
			/10	
Coordination				
1.	Rotate shoulder girdle 6 times (move each shoulder 3 times forward)	Does not move right side 3 times Asymmetric rotation Symmetric rotation	0 1 2	If 0, item 2 of also 0
2.	Repeat item 1, perform within 6 s	Asymmetric rotation Symmetric rotation	0 1	
3.	Rotate pelvis girdle 6 times (move each knee 3 times forward)	Does not move right side 3 times Asymmetric rotation Symmetric rotation	0 1 2	If 0, item 4 is also 0
4.	Repeat item 3, perform within 6 s	Asymmetric rotation Symmetric rotation	0 1	
			/6	
Total Trunk Impairment Scale			/23	