

## Items of MMT

---

<i>In bed</i>	<i>1</i>	<i>0</i>
1 Able to roll onto one side	<input type="checkbox"/>	<input type="checkbox"/>
2 Able to rise from lying to sitting position	<input type="checkbox"/>	<input type="checkbox"/>
<i>The sitting position</i>		
3 No retropulsion of the trunk	<input type="checkbox"/>	<input type="checkbox"/>
4 Able to bend trunk forward	<input type="checkbox"/>	<input type="checkbox"/>
5 Able to rise from a chair	<input type="checkbox"/>	<input type="checkbox"/>
<i>The standing position</i>		
6 Possible	<input type="checkbox"/>	<input type="checkbox"/>
7 Without assistance (material or human)	<input type="checkbox"/>	<input type="checkbox"/>
8 Able to stand on two legs with closed eyes	<input type="checkbox"/>	<input type="checkbox"/>
9 Able to stand on one leg	<input type="checkbox"/>	<input type="checkbox"/>
10 No retropulsion	<input type="checkbox"/>	<input type="checkbox"/>
11 Reactive postural responses	<input type="checkbox"/>	<input type="checkbox"/>
12 Protective reactions of upper limbs	<input type="checkbox"/>	<input type="checkbox"/>
13 Stepping reactions forwards	<input type="checkbox"/>	<input type="checkbox"/>
14 Stepping reactions backwards	<input type="checkbox"/>	<input type="checkbox"/>
<i>Gait</i>		
15 Possible	<input type="checkbox"/>	<input type="checkbox"/>
16 Without assistance (material or human)	<input type="checkbox"/>	<input type="checkbox"/>
17 Normal heel-strike	<input type="checkbox"/>	<input type="checkbox"/>
18 No knee flexion	<input type="checkbox"/>	<input type="checkbox"/>
19 No retropulsion	<input type="checkbox"/>	<input type="checkbox"/>
20 Harmonious turn round	<input type="checkbox"/>	<input type="checkbox"/>
<i>Total : .. / 20</i>		

---

The score was established as follows:

- In bed

For item 1 and 2, the grade 1 was obtained when the final position was reached without assistance. For item 1, the score 1 was given when the subject was observed in stabilized position on the side.

- In sitting position :

For item 3, the retropulsion was observed in sagittal plane. The retropulsion was noted when the buttocks were located on the anterior side of the seat while the trunk rested at the back of the armchair. The grade 1 was given for normal position, without retropulsion.

For item 4, the grade 1 was reached when the subject could bend the trunk forwards beyond the vertical.

For item 5, the grade 1 was obtained when the subject could rise from a chair with or without pushing on the upper limbs.

- In standing position

For item 7, the grade 1 was given if the upright posture was or 2 persons, or without support of a cane or a walker.

For item 8, the grade 1 was reached if the standing position was stabilized without disequilibrium when their eyes were closed.

For item 9, a small support can be authorized in order to allow unipodal position in patients showing fear of falling.

For item 10, the grade 1 was obtained when the subject was able to maintain standing position without backward disequilibrium.

For item 11, reactive postural responses were tested in sagittal plane through a slight push applied to the trunk in order to assess the quality of muscular adaptations.achieved without assistance of 1

For items 12, 13 and 14, all the protective reactions were tested using a stronger push, which tended to make center of mass projections leave the base of support. For item 12, protective reactions of upper limbs were assessed in front of a wall in order to avoid the stepping reactions.

- During gait

For item 16, the same remarks as in item 7 can be used.

For item 17, the subject who kept a normal heel-strike obtained 1 point.

For item 18, an attitude with an abnormal knee flexion may be observed in patients with balance deficit. In these subjects, abnormal knee flexion was observed only during gait and disappeared when the subject was lying. The level was rated 1 when the patient could walk without any knee flexion.

For item 19, characteristics of retropulsion were analyzed in the same way than in item 10, the grade 1 being given when no retropulsion was found.

For item 20, the grade 1 was reached if both no interruption and no small steps were observed during the turn round.