

**FUGL-MEYER ASSESSMENT  
LOWER EXTREMITY (FMA-LE)  
Assessment of sensorimotor function**

**ID:**  
**Date:**  
**Examiner:**

*Fugl-Meyer AR, Jaasko L, Leyman I, Olsson S, Steglind S: The post-stroke hemiplegic patient. 1. a method for evaluation of physical performance. Scand J Rehabil Med 1975, 7:13-31.*

<b>E. LOWER EXTREMITY</b>					
<b>I. Reflex activity</b> , supine position		<b>none</b>	<b>can be elicited</b>		
<b>Flexors:</b> knee flexors		0	2		
<b>Extensors:</b> patellar, achilles (at least one)		0	2		
Subtotal I (max 4)					
<b>II. Volitional movement within synergies</b> supine position		<b>none</b>	<b>partial</b>	<b>full</b>	
<b>Flexor synergy:</b> Maximal hip flexion (abduction/external rotation), maximal flexion in knee and ankle joint (palpate distal tendons to ensure active knee flexion).	Hip flexion	0	1	2	
	Knee flexion	0	1	2	
	Ankle dorsiflexion	0	1	2	
<b>Extensor synergy:</b> From flexor synergy to the hip extension/adduction, knee extension and ankle plantar flexion. Resistance is applied to ensure active movement, evaluate both movement and strength (compare with the unaffected side)	Hip extension	0	1	2	
	Knee extension	0	1	2	
	Ankle plantar flexion	0	1	2	
Subtotal II (max 14)					
<b>III. Volitional movement mixing synergies</b> sitting position, knee 10cm from the edge of the chair/bed		<b>none</b>	<b>partial</b>	<b>full</b>	
<b>Knee flexion</b> from actively or passively extended knee	no active motion less than 90° active flexion, palpate tendons of hamstrings more than 90° active flexion	0	1	2	
<b>Ankle dorsiflexion</b> compare with unaffected side	no active motion limited dorsiflexion complete dorsiflexion	0	1	2	
Subtotal III (max 4)					
<b>IV. Volitional movement with little or no synergy</b> standing position, hip at 0°		<b>none</b>	<b>partial</b>	<b>full</b>	
<b>Knee flexion to 90°</b> hip at 0°, balance support is allowed	no active motion or immediate, simultaneous hip flexion less than 90° knee flexion and/or hip flexion during movement at least 90° knee flexion without simultaneous hip flexion	0	1	2	
<b>Ankle dorsiflexion</b> compare with unaffected side	no active motion limited dorsiflexion complete dorsiflexion	0	1	2	
Subtotal IV (max 4)					
<b>V. Normal reflex activity</b> supine position, assessed only if full score of 4 points is achieved in part IV, compare with the unaffected side		<b>hyper</b>	<b>lively</b>	<b>normal</b>	
<b>Reflex activity</b> knee flexors, Patellar, Achilles,	2 of 3 reflexes markedly hyperactive 1 reflex markedly hyperactive or at least 2 reflexes lively maximum of 1 reflex lively, none hyperactive	0	1	2	
Subtotal V (max 2)					
<b>Total E</b> (max 28)					

<b>F. COORDINATION/SPEED</b> , supine, after one trial with both legs, eyes closed, heel to knee cap of the opposite leg, 5 times as fast as possible		marked	slight	none
<b>Tremor</b>		0	1	2
<b>Dysmetria</b>	pronounced or unsystematic slight and systematic no dysmetria	0	1	2
		≥ 6s	2 - 5s	< 2s
<b>Time</b>	6 or more seconds slower than unaffected side 2-5 seconds slower than unaffected side less than 2 seconds difference	0	1	2
<b>Total F</b> (max 6)				

<b>H. SENSATION</b> , lower extremity eyes closed, compare with the unaffected side		anesthesia	hypoesthesia or dysesthesia	normal
<b>Light touch</b>	leg foot sole	0 0	1 1	2 2
		less than 3/4 correct or absence	3/4 correct or considerable difference	correct 100%, little or no difference
<b>Position</b>	hip knee ankle great toe (IP-joint)	0 0 0 0	1 1 1 1	2 2 2 2
<b>Total H</b> (max12)				

<b>I. PASSIVE JOINT MOTION</b> , lower extremity supine position, compare with the unaffected side				<b>J. JOINT PAIN</b> during passive motion, lower extremity			
		only few degrees (<10° hip)	decreased	normal	pronounced pain during movement or very marked pain at the end of the movement	some pain	no pain
<b>Hip</b>	Flexion	0	1	2	0	1	2
	Abduction	0	1	2	0	1	2
	External rotation	0	1	2	0	1	2
	Internal rotation	0	1	2	0	1	2
<b>Knee</b>	Flexion	0	1	2	0	1	2
	Extension	0	1	2	0	1	2
<b>Ankle</b>	Dorsiflexion	0	1	2	0	1	2
	Plantar flexion	0	1	2	0	1	2
<b>Foot</b>	Pronation	0	1	2	0	1	2
	Supination	0	1	2	0	1	2
<b>Total</b> (max 20)				<b>Total</b> (max 20)			

<b>E. LOWER EXTERMTY</b>	/28
<b>F. COORDINATION / SPEED</b>	/6
<b>TOTAL E-F (motor function)</b>	/34

<b>H. SENSATION</b>	/12
<b>I. PASSIVE JOINT MOTION</b>	/20
<b>J. JOINT PAIN</b>	/20