

Functional Assessment System

Linköping University
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of Lower-Extremity Dysfunction

Department of Orthopaedic Surgery
Department of Caring Sciences
Linköping University
S-581 85 Linköping, Sweden

ULRIKA ÖBERG

Assessment System of Lower Extremity Function

Variable		Score				
		0	1	2	3	4
1.	Hip flexion					
2.	Extension deficit, hip					
3.	Abduction, hip					
4.	Adduction, hip					
5.	Knee flexion					
6.	Extension deficit, knee					
7.	Quadriceps muscle strength					
8.	Hamstrings muscle strength					
9.	Raising up from half-standing					
10.	Raising up/sitting down					
11.	Step height					
12.	Standing on one leg					
13.	Stair climbing					
14.	Gait speed (m/s)					
15.	Walking aid					
16.	Communication/Transport					
17.	Work/House-keeping					
18.	ADL-functions, other					
19.	Leisure time/Hobbies					
20.	Pain					

x = Preoperative

0 = Desired

◆ = Postoperative

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Table 4.1. Short key to the variables

Variable	0	1	2	3	4
1. Hip flexion	$\geq 100^\circ$	$85^\circ-95^\circ$	$70^\circ-80^\circ$	$50^\circ-65^\circ$	$\leq 50^\circ$
2. Extension deficit, hip	No deficit	5°	10°	15°	$>15^\circ$
3. Abduction, hip	$>15^\circ$	15°	10°	5°	0°
4. Adduction, hip	$>15^\circ$	15°	10°	5°	0°
5. Knee flexion	$\geq 115^\circ$	$100^\circ-110^\circ$	$85^\circ-95^\circ$	$70^\circ-80^\circ$	$\leq 65^\circ$
6. Extension deficit, knee	No deficit	5°	10°	15°	$>15^\circ$
7. Quadriceps muscle strength M=190 Nm F=100 Nm	$\geq 70\%$	60%	50%	40%	$\leq 30\%$
8. Hamstrings muscle strength % of Quad-strength	$\geq 60\%$	50%	40%	30%	$<30\%$
9. Rising from half-standing	>25	15-24	10-14	5-9	<5
10. Rising/sitting down	35 cm (sofa)	40 cm (car seat)	45 cm (ordinary chair)	50 cm	≥ 55 cm
11. Step height	45 cm (tractor)	40 cm (ordinary car)	23 cm (bus, train)	17 cm (stairs)	≤ 10 cm
12. Standing on one leg	40-60 s	25-39 s	15-24 sec.	5-14 s	<5 s
13. Stair climbing	Full performance	1 support Healthy leg first	2 supports Healthy leg first	Personal solution, backwards	Unable
14. Gait speed (m/s)	≥ 1.4	1.0-1.3	0.7-0.9	0.5-0.6	<0.5
15. Walking aid	0	1 stick or crutch	Rolling walker or 2 crutches	Gait chair	Unable to walk
16. Communication/transport	No restriction	Can drive a car, difficulties with bus, train	In car, cannot use anything else	In car with company	Handicap transportation
17. Work/House-keeping	No restriction	Can perform everything, but with pain	Work half-time, some help at home	Cannot work, more help at home	Help with everything
18. ADL-functions, other	No restriction	Needs to sit in all ADL-situations	Needs aids for stockings and shoes cannot manage pedicure	Needs external help with stockings and shoes	Help with everything
19. Leisure time/Hobbies	No restriction	Can do everything, but with more pain	Can do 50% of activities	Serious reduction of activities	Total reduction of activities
20. Pain	No pain	Pain in load situations	Pain at rest	Pain at load and at rest	Permanent pain