

Patient Name: _____ Date: ____ / ____ / ____ Evaluator: _____ Signature: _____







ATEND

ADAPTED TEST OF NEUROMUSCULAR DISORDERS
 Test performed in sitting and reclined positions in the wheelchair.



Spinal surgery (Y/N): ____ TLSO (Y/N): ____ Assessment: In person Telemedicine

Type of Chair	Type of Back	Type of Seat	Others
<input type="checkbox"/> Recline+Tilt	<input type="checkbox"/> Planar	<input type="checkbox"/> Roho/Jay/Air	<input type="checkbox"/> Trunk laterals -Removable <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Tilt Only	<input type="checkbox"/> Molded	<input type="checkbox"/> Foam	<input type="checkbox"/> Hip guides -Removable <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____



Upper Limb Functional score					
SCORE 6	SCORE 5	SCORE 4	SCORE 3	SCORE 2	SCORE 1
Starting with arms at the sides, the patient can abduct the arms in a full circle without shoulder or elbow flexion until hands reach overhead. 	Can raise arms above head only by flexing the elbow (i.e. shortening the circumference of the movement) or using accessory muscles 	Cannot raise hands above the head but can raise a cup with 200g weight in it to mouth using both hands if necessary. 	Can raise hands to mouth but cannot raise a cup with 200g weight in it to mouth. 	Cannot raise hand to mouth but can use hands to hold pen or pick up pennies or a checker from table; drive wheelchair 	Cannot raise hands to mouth and has no useful function of hands. 
Summary of Contractures <input type="checkbox"/> Not assessed	RIGHT Min<20% Mod20-50% Max>50%	Comments:	LEFT Min<20% Mod20-50% Max>50%	Comments	
Neck Contractures	No / Min / Mod / Max		No / Min / Mod / Max		
Shoulder contractures	No / Min / Mod / Max		No / Min / Mod / Max		
Elbow contractures	No / Min / Mod / Max		No / Min / Mod / Max		
Wrist contractures	No / Min / Mod / Max		No / Min / Mod / Max		
Finger contractures	No / Min / Mod / Max		No / Min / Mod / Max		
Hip contractures	No / Min / Mod / Max		No / Min / Mod / Max		
Knee contractures	No / Min / Mod / Max		No / Min / Mod / Max		
Ankle contractures	No / Min / Mod / Max		No / Min / Mod / Max		
Jaw opening (in mm)	No / Min / Mod / Max		No / Min / Mod / Max		



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Test in SEMI-RECLINE Position

Item 1. Active arm movement	Details: 135° recline or tilt, arms on armrest, elbow in maximum extension. May support forearm/elbow and passively demonstrate tasks. Tick all active movement observed/ more than one box					
4	3	2	1	0	R	L
Anti-gravity shoulder movement Elbow lifted off arm rest (open chain)	<input type="checkbox"/> Raises hand and forearm off surface (elbows in max available ext)	<input type="checkbox"/> Any active wrist movement	<input type="checkbox"/> Any isolated finger movement	<input type="checkbox"/> No movement of upper limb		
Item 2. Active leg movement	Details: 135° recline or tilt, move leg / foot supports away. Legs supported on table at seat height for attempting score 2 – 4. Score 3: Test with feet together. Tick all active movement observed/ more than one box					
4	3	2	1	0	R	L
Anti-gravity hip movement – lifts feet and knees off surface	<input type="checkbox"/> Knees in max available extension and ER lifts knees off surface – Feet together	<input type="checkbox"/> Gravity eliminated knee movement – flexion or extension whilst hip ABD and ER	<input type="checkbox"/> Any ankle movement	<input type="checkbox"/> No movement of lower limb		
Item 3. Adduction	Details: 135° recline or tilt. For score 2 - each leg positioned in max ABD and ER asked to bring back to midline. Score 1: test with feet apart, thigh not touching seat					
4	3	2	1	0	R	L
		Able to bring leg back to neutral with control & from ER position	Holds position – knees not touching, feet hip width apart for count of 3	Unable to maintain or achieve start position		
Item 4. Hand grip	Details: 135° recline or tilt, Upper limb support (elbow on armrest, may support forearm/elbow, shoulder on backrest). Use your finger and ask pt to grasp. Lift arm slowly towards 90° shoulder flexion					
4	3	2	1	0	R	L
Maintains hand grip with shoulder off surface	Maintains grip with elbow off surface (shoulders on surface)	Maintains grip with forearm off surface (elbow supported)	Maintains grip only with no traction	No attempt to maintain grasp		
Item 5. Head in midline - recline	Details: 135° recline or tilt, head in. midline (+-15°). Flat surface (clipboard) behind head For 3 & 4 must have at least 60° range from midline)					
4	3	2	1	0	R	L
Rotates from maximum R rotation to midline	Turns head part way back to midline (10% avail range)	Maintains midline for 5 or more seconds	Maintains midline, less than 5 seconds	Head falls to side, no attempts to regain midline		
Item 6. Lifts head	Details: Start in 135° tilt, progress to 110°, then 90°. Clipboard behind head. Arms folded by pt or by you across trunk Ask pt to lift head to look at toes.					
4	3	2	1	0	SCORE	
	Able to lift head with/without compensation from 135° trunk tilt	Able to lift head with/without compensation from 115° trunk tilt	Able to lift head with/without compensation from <100° trunk tilt	Unable		
						



MOVE CHAIR TO UPRIGHT SITTING POSITION

Item 7. Ability to balance in wheelchair	Details: Start in upright sitting 100° recline or tilt, remove armrests if more able				
4	3	2	1	0	SCORE
	Able to push upright from complete forward flexion by pushing up with hands	Able to move the upper part of the body > 30° in all directions, but cannot sit back up OR Able to move the upper part of the body > 30 degrees in at least one direction from the upright position	Able to move the upper part of the body < 30° from one side to the other	Unable to change position of the upper body OR cannot sit without total support	

Item 8. Ability to move arms	Details: Start in upright sitting 90-100° recline or tilt For 0 – 2 you may support forearm or elbow to observe					
4	3	2	1	0	R	L
	Able to raise arms above the head with or without compensatory movements	Able to raise the forearm against gravity	Able to lift hands against gravity when forearm is supported	Able to lift fingers against gravity.		

Item 9. Shoulder & elbow flexion	Details: Start in upright sitting 100° recline or tilt, remove lateral support if it ABD arm, remove armrests if testing 2-4. Looking for open chain movement elbow may be flexed					
4	3	2	1	0	R	L
Abducts or flexes shoulder to 60°	Abducts or flexes shoulder to 30°	Any shoulder flexion or abduction	Flexes elbow against gravity	No attempt to lift arm		

Item 10. Knee extension	Details: Start in upright sitting 100° recline or tilt. Remove leg / feet support for freedom of movement Evaluator hand under knee to maintain thigh in horizontal to ground position Can't test for 3-4 score if knee contractures 100° or more					
4	3	2	1	0	R	L
	Extends knee to more than 45°	Extends knee 15° to 45°	Any visible knee extension	No visible knee extension		

Item 11. Head Control - sitting	Details: Start in upright sitting 100° recline or tilt. Head not resting on head support For score 3 or 4, chin is no more than 3cm from sternum with mouth closed Start from checking score of 2. Tick all active movement observed/ more than one box				
4	3	2	1	0	SCORE
<input type="checkbox"/> Attains head upright from flexion and turns head side to side within available ROM (min of 60° active range)	<input type="checkbox"/> Able to right head back to midline from flexion	<input type="checkbox"/> Maintains head upright for >15 sec. Bobbing or stacking control	<input type="checkbox"/> Maintains head in midline for >5 sec. with the head tipped in up to 30° of forward flex or ext.	<input type="checkbox"/> No response, head hangs	

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Item 12. Pick up 10 g weight with fingers	Details: Start in upright sitting 100° recline or tilt. Height of table / clipboard to suit patient to facilitate task. Can pick up weight any method					
4	3	2	1	0	R	L
		Able to grip weight and lift off surface	Grip weight only	Unable		
Item 13. Touch diagram squares	Details: Start in upright sitting 100° recline or tilt. Height of table / clipboard to suit patient to facilitate task. Any finger can be used to perform task					
4	3	2	1	0	R	L
	Raises the finger and places it on the 8 drawings without touching the lines	Raises the finger and places it imprecisely on 1 to 8 drawings of the diagram	Can only slide finger from at least one drawing	Cannot raise the finger, nor slide it onto a drawing		
Item 14. Ability to control joystick	Details: Start in upright sitting 100° recline or tilt. Controls in situ. Score 1: other technique = blowing, sucking systems or scanned driving.					
4	3	2	1	0	SCORE	
	Uses a standard joystick without special adaptation	Uses an adapted joystick (more sensitive, adapted knob, changed position)	Use other techniques than joystick to steer	Unable to operate wheelchair. Another person operates it		
TOTALS					Total R	Total L
Notes:						
TOTAL SCORE (46)						