

Neurological Assessment from Birth to 6 Years

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PERSONAL INFORMATION

Name:	File no.:
Date of birth:	Length of gestation:

Examination	Date of examination	Age	Corrected age	Comments
1st– 9th Month				
I	1 st – 3 rd Month			
II	4 th – 6 th Month			
III	7 th – 9 th Month			
10th– 24th Month				
IV	10 th – 12 th Month			
V	13 th – 18 th Month			
VI	19 th – 24 th Month			
3rd– 6th Year				
VII	3 rd Year			
VIII	4 th Year			
IX	5 th Year			
X	6 th Year			




Life environment	Mother	Father
Date of Birth		
Education		
Occupation		
Changes in the child's life during follow-up:		

Growth		Value	± 2 SD	> 2 SD	< 2 SD	HC/Height discordance	
1st– 9th Month							
I	HC	cm	0	2	2	HC concordant	0
	Height	cm	0	X	X	Height > HC	X
	Weight	kg	0	X	X	HC > Height	X
II	HC	cm	0	2	2	HC concordant	0
	Height	cm	0	X	X	Height > HC	X
	Weight	kg	0	X	X	HC > Height	X
III	HC	cm	0	2	2	HC concordant	0
	Height	cm	0	X	X	Height > HC	X
	Weight	kg	0	X	X	HC > Height	X
10th– 24th Month							
IV	HC	cm	0	2	2	HC concordant	0
	Height	cm	0	X	X	Height > HC	X
	Weight	kg	0	X	X	HC > Height	X
V	HC	cm	0	2	2	HC concordant	0
	Height	cm	0	X	X	Height > HC	X
	Weight	kg	0	X	X	HC > Height	X
VI	HC	cm	0	2	2	HC concordant	0
	Height	cm	0	X	X	Height > HC	X
	Weight	kg	0	X	X	HC > Height	X
3rd– 6th Year							
VII	HC	cm	0	2	2	HC concordant	0
	Height	cm	0	X	X	Height > HC	X
	Weight	kg	0	X	X	HC > Height	X
VIII	HC	cm	0	2	2	HC concordant	0
	Height	cm	0	X	X	Height > HC	X
	Weight	kg	0	X	X	HC > Height	X
IX	HC	cm	0	2	2	HC concordant	0
	Height	cm	0	X	X	Height > HC	X
	Weight	kg	0	X	X	HC > Height	X
X	HC	cm	0	2	2	HC concordant	0
	Height	cm	0	X	X	Height > HC	X
	Weight	kg	0	X	X	HC > Height	X

Motor development milestones in the first 2 years of life

Head control _____ months	
Present before 4 months	0
Acquired during 5 th or 6 th month	1
Acquired or absent after 6 months	2
Sitting position _____ months	
Acquired before 9 months	0
Acquired between the 10 th and 12 th month	1
Acquired or absent after 12 months	2
Walking independently _____ months	
Acquired before 18 months	0
Acquired between the 19 th and 24 th month	1
Acquired or absent after 2 years	2
Putting a cube into a cup (by imitation) _____ months	
Acquired before 10 months	0
Acquired between the 11 th and 14 th month	1
Acquired or absent after 14 months	2
Grasping a pellet (thumb-index pinch) _____ months	
Acquired before 12 months	0
Acquired between the 13 th and 15 th month	1
Acquired or absent after 15 months	2
Building a three-cube tower (by imitation) _____ months	
Acquired before 21 months	0
Acquired between the 22 nd and 24 th month	1
Acquired or absent after 2 years	2
Double circle of index and thumb of both hands (by imitation) _____ months	
Immediate success at 5 years	0
Hesitant response at 5 years	1
Failure at 5 years	2

1st – 9th Month

Muscle Tone	I (1 st - 3 rd Month)			II (4 th - 6 th Month)			III (7 th - 9 th Month)			
	Angle	Norm	Score	Angle	Norm	Score	Angle	Norm	Score	
Upper Limbs										
Scarf sign 	R		1	0		1	1		1	2
			2	0		2	0		2	0
			3	2		3	0		3	0
	L		NR*	2		NR*	2		NR*	2
			1	0		1	1		1	2
			2	0		2	0		2	0
	3	2		3	0		3	0		
	NR*	2		NR*	2		NR*	2		
Lower Limbs										
Adductors 	R		≥ 40°	0		≥ 70°	0		≥ 100°	0
	L		≤ 30°	1		≤ 60°	1		80°-90°	1
			NR*	2		NR*	2		≤ 70°	2
									NR*	2
Popliteal angle 	R		≥ 80°	0		≥ 90°	0		≥ 110°	0
			≤ 70°	1		≤ 80°	1		90°-100°	1
			NR*	2		NR*	2		≤ 80°	2
	L		≥ 80°	0		≥ 90°	0		≥ 110°	0
			≤ 70°	1		≤ 80°	1		90°-100°	1
			NR*	2		NR*	2		≤ 80°	2
								NR*	2	
Dorsiflexion of the foot										
S L O W angle	R					≤ 80°	0		≤ 80°	0
						90°-100°	1		90°-100°	1
						≥ 100°	2		≥ 100°	2
	L					≤ 80°	0		≤ 80°	0
						90°-100°	1		90°-100°	1
						≥ 110°	2		≥ 110°	2
R A P I D angle	R					Identical	0		Identical	0
						Phasic str.	1		Phasic str.	1
						Tonic str.	2		Tonic str.	2
	L					Identical	0		Identical	0
						Phasic str.	1		Phasic str.	1
						Tonic str.	2		Tonic str.	2
Comparison of the R and L sides: Asymmetry even within normal range										
Comparable		0		0		0		0		
Right side more tonic		1		1		1		1		
Left side more tonic		1		1		1		1		

*NR no resistance

1st – 9th Month

Body Axis	I	II	III			
Dorsal extension						
Absent or minimal	0	0	0			
Moderate	0	0	0			
Excessive (opisthonos)	2	2	2			
Ventral flexion						
Absent or minimal	0	0	0			
Moderate	1	1	1			
Unlimited (rag doll)	2	2	2			
Comparison of curvatures						
Flexion \geq Extension	0	0	0			
Flexion < Extension	1	1	1			
Excessive flexion and extension	2	2	2			
Motor Activity						
Face						
Facial expressions						
Varied and symmetrical	0	0	0			
Insufficient	1	1	1			
Drooling						
Absent	0	0	0			
Present	X	X	X			
Facial paralysis						
Absent	0	0	0			
Present Side of face: _____	2	2	2			
Fasciculations of the tongue (peripheral, at rest)						
Absent	0	0	0			
Present	2	2	2			
Limbs						
Voluntary movements (quantitative and qualitative)						
Coordinated and varied	0	0	0			
Insufficient, uncoordinated, stereotyped	1	1	1			
Barely present and/or very uncoordinated	2	2	2			
Hands and fingers	R	L	R	L	R	L
Finger movements present	0	0	0	0	0	0
Constantly closed hand	1	1	2	2	2	2
Inactive thumb	2	2	2	2	2	2

1st – 9th Month




Primitive Reflexes		I	II	III			
Sucking							
Present		0	0	0			
Insufficient		1	1	1			
Absent or completely inadequate		2	2	2			
Moro reflex							
Present		0	X	2			
Absent		2*	X	0			
Grasping reflex							
Present		0	X	2			
Absent		2*	X	0			
Automatic walking reflex							
Present		0	X	2			
Absent		2*	X	0			
Asymmetric tonic neck reflex							
Present		X	X	2			
Absent		X	X	0			
R/L asymmetry (Indicate affected side)							
Postural Reactions		R	L	R	L	R	L
Lateral propping reaction while seated	Present					0	0
	Incomplete/absent					X	X
Parachute reaction	Present					0	0
	Incomplete/absent					X	X
Deep Tendon Reflexes							
Patellar reflex (knee jerk)							
Normal		0	0	0	0	0	0
Very brisk+ clonus		X	X	X	X	X	X
Diffusion		X	X	X	X	X	X
Absent		2	2	2	2	2	2

*These observations are given a score of 2 only if other signs of CNS depression are present.

1st – 9th Month

Qualitative Abnormalities in Gross Motor Function and Acquired Deformities	I	II	III
Candlestick (R +L) Absent Present/fixed	0 X	0 X	0 X
Holding head behind the axis Abnormality absent Chin points upward, head behind the axis	0 X	0 X	0 2
Poorly maintained head control due to fatigue Fatigue absent Fatigue present	0 X	0 X	0 2
Sitting position Fatigue absent Falls forward (global hypotonia) Falls backward (hypertonia of the extensor muscles)			0 X 1
Standing position Adequate reaction to standing Excessive reaction to standing (episthotonos)	0 2	0 2	0 2
Lower limb deformities Deformity absent Scissoring of the leg	0 2	0 2	0 2
Involuntary movement Absent Present Describe: _____	0 2	0 2	0 2
Diffuse rigidity No rigidity Similar to the resistance felt when bending a lead pipe	0 2	0 2	0 2
Dystonia Absent Present	0 2	0 2	0 2

10th – 24th Month

Muscle Tone		IV (10 th - 12 th Month)			V (13 th - 18 th Month)			VI (19 th - 24 th Month)		
		Angle	Norm	Score	Angle	Norm	Score	Angle	Norm	Score
Upper Limbs										
Scarf sign 	R	2 or 3 1 NR*	0 2 X	2 or 3 1 NR*	0 2 X	2 or 3 1 NR*	0 2 X	2 or 3 1 NR*	0 2 2	
	L	2 or 3 1 NR*	0 2 X	2 or 3 1 NR*	0 2 X	2 or 3 1 NR*	0 2 X	2 or 3 1 NR*	0 2 2	
Lower Limbs										
Adductors 	R +	≥ 110° 80-100° ≤ 70° NR*	0 1 2 X	≥ 110° 80-100° ≤ 70° NR*	0 1 2 X	≥ 110° 80-100° ≤ 70° NR*	0 1 2 X	≥ 110° 80-100° ≤ 70° NR*	0 1 2 2	
	L	≥ 110° 80-100° ≤ 70° NR*	0 1 2 X	≥ 110° 80-100° ≤ 70° NR*	0 1 2 X	≥ 110° 80-100° ≤ 70° NR*	0 1 2 X	≥ 110° 80-100° ≤ 70° NR*	0 1 2 2	
Popliteal angle 	R	≥ 110° 90-100° ≤ 80° NR*	0 1 2 X	≥ 110° 90-100° ≤ 80° NR*	0 1 2 X	≥ 110° 90-100° ≤ 80° NR*	0 1 2 X	≥ 110° 90-100° ≤ 80° NR*	0 1 2 2	
	L	≥ 110° 90-100° ≤ 80° NR*	0 1 2 X	≥ 110° 90-100° ≤ 80° NR*	0 1 2 X	≥ 110° 90-100° ≤ 80° NR*	0 1 2 X	≥ 110° 90-100° ≤ 80° NR*	0 1 2 2	
Dorsi-flexion of the foot SLOW angle	R	≤ 80° 90-100° ≥ 110°	0 1 2	≤ 80° 90-100° ≥ 110°	0 1 2	≤ 80° 90-100° ≥ 110°	0 1 2	≤ 80° 90-100° ≥ 110°	0 1 2	
	L	≤ 80° 90-100° ≥ 110°	0 1 2	≤ 80° 90-100° ≥ 110°	0 1 2	≤ 80° 90-100° ≥ 110°	0 1 2	≤ 80° 90-100° ≥ 110°	0 1 2	
Dorsi-flexion of the foot RAPID angle	R	Identical Phasic str. Tonic str.	0 1 2	Identical Phasic str. Tonic str.	0 1 2	Identical Phasic str. Tonic str.	0 1 2	Identical Phasic str. Tonic str.	0 1 2	
	L	Identical Phasic str. Tonic str.	0 1 2	Identical Phasic str. Tonic str.	0 1 2	Identical Phasic str. Tonic str.	0 1 2	Identical Phasic str. Tonic str.	0 1 2	
Comparison of the R and L sides: Asymmetry even within normal range										
Comparable		0			0			0		
Right side more tonic		1			1			1		
Left side more tonic		1			1			1		

*NR no resistance

10th – 24th Month

Body Axis	IV	V	VI			
Dorsal extension						
Absent or minimal	0	0	0			
Moderate	0	0	0			
Excessive (opisthosis)	2	2	2			
Ventral flexion						
Moderate	0	0	0			
Absent or minimal	1	1	1			
Unlimited (rag doll)	2	2	2			
Comparison of curvatures						
Flexion \geq Extension	0	0	0			
Flexion < Extension	1	1	1			
Excessive flexion and extension	2	2	2			
Motor Activity						
Face						
Facial expressions						
Varied and symmetrical	0	0	0			
Insufficient	1	1	1			
Drooling						
Absent	X	0	0			
Present	X	1	1			
Facial paralysis						
Absent	0	0	0			
Present Side of face: _____	2	2	2			
Fasciculations of the tongue (peripheral, at rest)						
Absent	0	0	0			
Present	2	2	2			
Limbs						
Voluntary movements (quantitative and qualitative)						
Coordinated and varied	0	0	0			
Insufficient, uncoordinated, stereotyped	1	1	1			
Barely present and/or very uncoordinated	2	2	2			
Hands and fingers	R	L	R	L	R	L
Finger movements present	0	0	0	0	0	0
Constantly closed hand	2	2	2	2	2	2
Inactive thumb	2	2	2	2	2	2




10th – 24th Month

	IV		V		VI	
	R	L	R	L	R	L
Primitive Reflexes						
Asymmetric tonic neck reflex (ATNR)						
Absent	0	0	0	0	0	0
Present	2	2	2	2	2	2
R/L asymmetry (Indicate affected side)						
Postural Reactions						
Lateral propping reaction while seated						
Present	0	0	0	0	0	0
Incomplete	1	1	1	1	1	1
Absent	2	2	2	2	2	2
Parachute reaction						
Present	0	0	0	0	0	0
Incomplete	1	1	1	1	1	1
Absent	1	1	2	2	2	2
Deep Tendon Reflexes						
Patellar reflex (knee jerk)						
Normal	0	0	0	0	0	0
Very brisk + clonus	X	X	X	X	X	X
Diffusion	X	X	X	X	X	X
Absent	2	2	2	2	2	2

10th – 24th Month

Qualitative Abnormalities in Gross Motor Function and Acquired Deformities	IV	V	VI
Holding head behind the axis			
Abnormality absent	0	0	0
Chin points upward, head behind the axis	2	2	2
Poorly maintained head control due to fatigue			
Fatigue absent	0	0	0
Fatigue present	2	2	2
Sitting position			
Adequate	0	0	0
Falls forward (global hypotonia)	1	2	2
Falls backward (hypertonia of the extensor muscles)	1	2	2
Poorly maintained sitting position due to fatigue			
Abnormality absent	0	0	0
Abnormality present	X	2	2
Standing position			
Adequate reaction to standing	0	0	0
Excessive reaction to standing (episthotonos)	2	2	2
Lower limb deformities			
Deformity absent	0	0	0
Scissoring of the leg	2	2	2
Involuntary movement			
Absent	0	0	0
Present Describe: _____	2	2	2
Diffuse rigidity			
No rigidity	0	0	0
Similar to the resistance felt when bending a lead pipe	2	2	2
Dystonia			
Absent	0	0	0
Present	2	2	2

3rd – 6th Year

Muscle Tone			VII (3 rd Year)		VIII (4 th Year)		IX (5 th - Year)		X (6 th - Year)	
			Angle	Score	Angle	Score	Angle	Score	Angle	Score
Norm										
Upper Limbs										
Scarf sign 	R	2 or 3 1 NR*		0 1 2		0 1 2		0 1 2		0 1 2
	L	2 or 3 1 NR*		0 1 2		0 1 2		0 1 2		0 1 2
Lower Limbs										
Adductors 	R	$\geq 110^\circ$		0		0		0		0
	L	$\leq 30^\circ$ NR*		1 2 2		1 2 2		1 2 2		1 2 2
Popliteal angle 	R	120° - 160° 100° - 110° $\leq 90^\circ$ $\geq 160^\circ$ NR*		0 1 2 1 2		0 1 2 1 2		0 1 2 1 2		0 1 2 1 2
	L	120° - 160° 100° - 110° $\leq 90^\circ$ $\geq 160^\circ$ NR*		0 1 2 1 2		0 1 2 1 2		0 1 2 1 2		0 1 2 1 2
Dorsiflexion of the foot										
SLOW angle	R	$\leq 80^\circ$ 90° - 100° $\geq 110^\circ$		0 1 2		0 1 2		0 1 2		0 1 2
	L	$\leq 80^\circ$ 90° - 100° $\geq 110^\circ$		0 1 2		0 1 2		0 1 2		0 1 2
RAPID angle	R	Identical Phasic str. Tonic str.		0 1 2		0 1 2		0 1 2		0 1 2
	L	Identical Phasic str. Tonic str.		0 1 2		0 1 2		0 1 2		0 1 2
Comparison of the R and L sides: Asymmetry even within normal range										
Comparable				0		0		0		0
Right side more tonic				1		1		1		1
Left side more tonic				1		1		1		1

*NR no resistance

3rd – 6th Year

Qualitative Abnormalities in Gross Motor Function and Acquired Deformities	VII	VIII	IX	X
Holding head behind the axis				
Abnormality absent	0	0	0	0
Chin points upward, head behind the axis	2	2	2	2
Poorly maintained head control due to fatigue				
Fatigue absent	0	0	0	0
Fatigue present	2	2	2	2
Sitting position				
Adequate	0	0	0	0
Falls forward (global hypotonia)	2	2	2	2
Falls backward (hypertonia of the extensor muscles)	2	2	2	2
Poorly maintained sitting position due to fatigue				
Abnormality absent	0	0	0	0
Abnormality present	2	2	2	2
Acquired deformities				
No deformities	0	0	0	0
Scoliosis	1	1	1	1
Kyphosis	1	1	1	1
Standing position				
Adequate reaction to standing	0	0	0	0
Excessive reaction to standing (episthotonos)	2	2	2	2
Lower limb deformities				
Deformity absent	0	0	0	0
Scissoring of the leg	2	2	2	2
Permanent flexion of the hip	X	X	X	X
Permanent flexion of the knee	X	X	X	X
Equine deformity of the foot	X	X	X	X
Dislocation of the hip	X	X	X	X
Other Specify: _____	X	X	X	X
Gait				
No abnormalities	0	0	0	0
Spastic gait	2	2	2	2
Ataxic gait	X	X	X	X
Hemiplegic gait	X	X	X	X
Walks with assistance	X	X	X	X
Involuntary movement				
Absent	0	0	0	0
Present Describe: _____	2	2	2	2
Diffuse rigidity				
No rigidity	0	0	0	0
Similar to the resistance felt when bending a lead pipe	2	2	2	2
Dystonia				
Absent	0	0	0	0
Present	2	2	2	2

**CLASSIFICATION AT 2 YEARS (CORRECTED AGE)
AND ANNUAL PROFILES UP TO 6 YEARS**

Neuromotor Categorization					
Neuromotor spectrum		Functional outcome			
Disabling CP	<input type="checkbox"/>	Age	3 rd	4 th	5 th 6 th
Non disabling CP	<input type="checkbox"/>	Independent walk			
Triad of neurocranial signs	<input type="checkbox"/>				
Isolated neuromotor or cranial signs	<input type="checkbox"/>	GMFS score			
No neuromotor signs	<input type="checkbox"/>	MACS score			
Disabling CP - no independent walk at 2 years of age (clearly indicate type below)					
Topographic variety					
Symptomatic variety					
Deficits other than neuromotor (according to standardized assessments)					
		Deficit			
normal limits		Mild	Moderate	Severe	
Cognitive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Visual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Behavioral problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Epilepsy	Controlled	<input type="checkbox"/>	Severe	<input type="checkbox"/>	
Problems other than neurological					
Growth	<input type="checkbox"/>	_____			
Respiratory	<input type="checkbox"/>	_____			
Digestive	<input type="checkbox"/>	_____			
Retinopathy	<input type="checkbox"/>	_____			
Other	<input type="checkbox"/>	_____			
Socio-familial Conditions					
Favorable	<input type="checkbox"/>	_____			
Unfavorable	<input type="checkbox"/>	_____			
Very unfavorable	<input type="checkbox"/>	_____			