

NEUROLOGICAL EXAMINATION AND QUESTIONNAIRE

(Adapted from Chiriboga, Kairam, Kline 1991)

Page 1 of 7

PART I: IDENTIFYING INFORMATION

1. Patient's ID Number:

	ID		
--	----	--	--
2. Current Clinic:

--	--

 SITE
3. Patient's Letter Code:

--	--	--

 INITS
4. Visit:

		VISIT
--	--	-------

 M -

sequence #	
0	0

 SEQNO
5. Testing Date:

--	--	--

 -

--	--

 -

--	--	--	--

 VIS_DT
- Month Day Year

PART II: QUESTIONNAIRE FOR THE CHILD'S CARETAKER

- | | | | | | |
|----|---|-------|--------------------|-----|----------|
| 1. | Which hand does your child prefer to | | Right | (1) | HANDED |
|  |  | ..... | Left | (2) | |
|  |  | ..... | No preference | (3) | |
|  |  | ..... | Not able to assess | (4) | |
| 2. | How would you describe your child's ability to swallow? | | | | SWALLOW |
| | Normal | ..... |  | (1) | |
| | Abnormal, no intervention needed | ..... |  | (2) | |
| | Abnormal, requires modification of food consistency | ..... |  | (3) | |
| | Abnormal, swallowing impossible, tube or parenteral feedings | ..... |  | (4) | |
| | Not able to assess | | | (5) | |
| 3. | How would you describe your child's ability to walk and climb stairs? | | | | WALKCLMB |
| | Walks and climbs stairs without assistance, and alternates feet upon stair climbing | ..... |  | (1) | |
| | Walks and climbs stairs without assistance, but does not alternate feet upon stair climbing | ..... |  | (2) | |
| | Walks unassisted, but cannot climb stairs without support | ..... |  | (3) | |
| | Walks only with assistance, or walks unassisted only with leg braces or other supporting device | ..... |  | (4) | |
| | Non-ambulatory despite supporting devices | ..... |  | (5) | |
| | Not old enough | | | (6) | |
| 4. | How would you describe your child's toileting? | Yes | No | N/A | DIAPNITE |
| A. | Routinely wears diapers at night | (1) | (2) | (3) | |
| B. | Wets at night | | | | WETSNITE |
| | More than 5 times/week | (1) | | | |
| | 1-5 times/week | (2) | | | |
| | 1/week to 1/month | (3) | | | |
| | Less than 1/month | (4) | | | |
| | N/A | (5) | | | |

- | | Yes | No | N/A | |
|---|-----|-----|-----|----------|
| C. Routinely wears diapers in daytime? | (1) | (2) | (3) | DIAP_DAY |
| 1. If NO, currently experiencing wetting accidents? | | | | |
| Often | (1) | | | WET_ACC |
| Occasionally | (2) | | | |
| Rarely | (3) | | | |
| N/A | (4) | | | |
| 5. Does your child have tingling, numbness, pins and needles, "electric shock" or a burning sensation in his/her hands or feet? | | | | |
| No | | (1) | | TINGNUMB |
| Yes, sometimes | | (2) | | |
| Yes, often | | (3) | | |
| Not able to assess | | (4) | | |
| Question not age appropriate | | (5) | | |
| 6. Has your child ever had a seizure or convulsion? | | | | |
| No | | (1) | | SEIZURE |
| Yes, with fever | | (2) | | |
| Yes, without fever | | (3) | | |
| Yes, both febrile and afebrile | | (4) | | |
| Not able to assess | | (5) | | |

PART III: QUESTIONS COMPLETED BY THE EXAMINER

- | | Yes | No | N/A | |
|--|-----|-----|-----|----------|
| 1. Does the child have sensory loss or sensory diminishment? | (1) | (2) | (3) | SENSLOSS |

If <u>NO</u> or <u>N/A</u> , skip to PART III, Question 2

- | | DESCLOS R | DESCLOS L |
|---|-----------|-----------|
| A. Which best describes the change? | | |
| Decrease or loss of pain/temperature/position sense/vibration in great toes | (1) | (1) |
| Decrease or loss of pain/temperature/position sense/vibration in ankles | (2) | (2) |
| Decrease or loss of pain/temperature/position sense/vibration in knees | (3) | (3) |
| Not able to assess | (4) | (4) |

ID Number

--	--	--	--

Visit		Seq					
<table border="1" style="display: inline-table;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>				-	<table border="1" style="display: inline-table;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>		

2. Does the child have loss or diminishment of motor function?

Yes No **LOSSSTRG**
(1) (2)

If NO, skip to PART IV, Question 1

A. Which best describes the loss of strength?

LOSSSTRU

1. Right Upper

Mild weakness (1)

Moderate weakness (2)

Severe weakness (3)

No change. (4)

Not able to assess (5)

2. Left Upper

LOSSSTLU

Mild weakness (1)

Moderate weakness (2)

Severe weakness (3)

No change. (4)

Not able to assess (5)

3. Right Lower

LOSSSTRL

Mild weakness (1)

Moderate weakness (2)

Severe weakness (3)

No change. (4)

Not able to assess (5)

4. Left Lower

LOSSSTLL

Mild weakness (1)

Moderate weakness (2)

Severe weakness (3)

No change. (4)

Not able to assess (5)

5. Nonfocal impairment of gross motor development

LOSSGMTR

Abnormal quality without delay in skills relative to age. (1)

Mild delay in skills relative to age (2)

Moderate or severe delay in skills relative to age (3)

6. Nonfocal impairment of fine motor skills

LOSSFMTR

Abnormal quality without delay in skills relative to age. (1)

Mild delay in skills relative to age (2)

Moderate or severe delay in skills relative to age (3)

B. Which best describes the change in tone?

LOSSTONE

Proximal decrease (1)

Proximal increase (2)

Distal decrease (3)

Distal increase (4)

Proximal and distal decrease (5)

Proximal and distal increase (6)

Proximal decrease and distal increase (7)

ID Number

--	--	--	--

Visit

--	--	--

Seq

--	--

PART IV: REFLEXES

Reflex Codes¹

- 1 = Muscle contraction without limb displacement
- 2 = Muscle contraction with limb displacement
- 3 = Muscle contraction accompanied by clonus
- 4 = No reflex elicited
- 8 = Not able to assess

			RIGHT	LEFT
1.	Biceps reflex ¹:	.....	☐ RFLXBICR	☐ RFLXBICL
2.	Knee jerk ¹:	.....	☐ RFLXKJR	☐ RFLXKJL
3.	Ankle jerk ¹:	.....	☐ RFLXAJR	☐ RFLXAJL
4.	Ankle clonus:	Codes: 1 - Clonus absent 2 - (1-4) beats on 2 trials 3 - ($\geq$ 5) beats on at least 1 of 2 trials 4 - Spontaneous clonus 8 - Not able to assess	☐ RFLXACR	☐ RFLXACL
5.	Crossed adductor response:	Codes: 1 - Absent 2 - Present 8 - Not able to assess	☐ RFLXARR	☐ RFLXARL
6.	Upgoing toe:	Codes: 1 - Absent 2 - Present 3 - Two informative trials not obtained	☐ RFLXUPTR	☐ RFLXUPTL

ID Number

--	--	--	--

Visit Seq

			-		
--	--	--	---	--	--

PART V: CRAWLING AND WALKING

1. Does the child ordinarily walk independently?

Yes No **WALKINDE**
(1) (2)

If No, complete question V-1A, then go to PART VI.
If Yes, go to question V-1B.

A. CRAWLING AND WALKING (Awake):

(observe child in underclothes or in tight top and shorts).
Complete 1 through 9, then go to PART VI.

Does Does Not Not Able
Task Do Task to Assess

1. Crawls on four limbs for 9 inches or more	(1)	(2)	(3)	CRWL9IN
2. Pulls-to-stand	(1)	(2)	(3)	PULL2STD
3. Stands alone for at least 3 seconds	(1)	(2)	(3)	STND3SEC
4. Stands alone for at least 30 seconds	(1)	(2)	(3)	STND30S
5. Takes at least 3 steps with support	(1)	(2)	(3)	STEP3SPT
6. Takes at least 3 steps holding onto furniture	(1)	(2)	(3)	STEP3HOL
7. Takes at least 3 steps without support	(1)	(2)	(3)	STEP3ALN
8. Gets up off floor to standing without help	(1)	(2)	(3)	STDUPALN
9. Walks independently for at least 6 feet	(1)	(2)	(3)	WALK6FT

Codes:

1 - Absent
2 - Present
8 - Not able to assess

B. GAIT FOR CHILDREN WHO WALK INDEPENDENTLY

Have the child walk a distance of 6' away from examiner,
turn around, and walk back. Repeat task, observing from
side.

	RIGHT	LEFT
1. Knee flexion	☐ KNEEFLXR	☐ KNEEFLXL
2. Knee hyperextension	☐ KNEHYPER	☐ KNEHYPEL
3. Toe walking	☐ TOEWALKR	☐ TOEWALKL
4. Circumducting gait	☐ CIRCGTR	☐ CIRCGTL
5. Decreased arm swing	☐ DECRSWNR	☐ DECRSWNL
6. Cortical arm posture (persistent adduction at shoulder w/flexion at elbow, with/without forearm pronation)	☐ CORARMPR	☐ CORARMPL

ID Number

--	--	--	--

Visit

--	--	--

Seq

--	--

PART VI: CLINICAL NEUROLOGICAL DIAGNOSIS

	<u>¹Distribution</u>	<u>²Severity Codes</u>
	1 -None	1 - None
	2 -General	2 - Mild
	3 -Axial	3 - Moderate
	4 -Limb	4 - Severe
	Distribution ¹	Severity ²
1. TONE		
A. Hypotonia	☐ HYPOTOND	☐ HYPOTONS
B. Hypertonia	☐ HYPRTOND	☐ HYPRTONS
2. DIAGNOSIS BY STUDY EXAMINER:		
Are any of the diagnoses listed below present today?	.....	Yes (1) No (2) DIAGNOS

If Yes, code diagnoses below.
If No, go to question PART VII-1.

*These diagnoses require demarcation of "side involved."



¹Diagnosis Codes

²Side Involved

11 -Ataxia, specify	29 -Static Encephalopathy (etiology	1 -Right
* 12 -Cranial Nerve Abnormality, Specify	30 -Static Encephalopathy (etiology	2 -Left
* 13 -Headaches (muscular contraction)	31 -Attention Deficit Hyperactivity	3 -Bilateral
* 14 -Headaches (vascular)	32 -Epilepsy (idiopathic)	4 -Side
15 -HIV-Associated Progressive	33 -State Abnormality < 6 months	
23 -Macrocephaly (> 95% for sex and	34 -Newborn Drug Withdrawal < 3	
24 -Microcephaly (< 5% for sex and	40 -Stroke, neurological deficit	
* 25 -Myelopathy, specify	41 -TIA	
* 26 -Myopathy, specify	88 -Other Neurological Condition	
* 27 -Peripheral Neuropathy or		

Diagnosis ¹	Side ²	Specify:
A. ☐ ☐ DIAGN_A	☐ DIAGN_AS	DIAGNASP
B. ☐ ☐ DIAGN_B	☐ DIAGN_BS	DIAGNBSP
C. ☐ ☐ DIAGN_C	☐ DIAGN_CS	DIAGNCSP
D. ☐ ☐ DIAGN_D	☐ DIAGN_DS	DIAGNDSP

ID Number	Visit	Seq
☐ ☐ ☐ ☐	☐ ☐ ☐ -	☐ ☐

PART VII: NEUROLOGIC STATUS BY STUDY EXAMINER

1. From a neurological standpoint, what do you think the status of the patient is since the last assessment? NEURSTA1
- 1 - Improved ☐
- 2 - Stable/unchanged
- * 3 - Deteriorated
- * 4 - Unable to assess
- 5 - No previous assessment

2. From a neurological standpoint, what do you think the status of the patient is since the initial (baseline) assessment? NEURSTA2
- 1 - Improved ☐
- 2 - Stable/unchanged
- * 3 - Deteriorated
- * 4 - Unable to assess
- 5 - No previous

- | | | | | |
|-------------------------|------|-----|-----|----------|
| 3. Summary findings | Yes | No | N/A | |
| A. New stroke | *(1) | (2) | (3) | NEW_STRK |
| B. New TIA | *(1) | (2) | (3) | NEW_TIA |

If either Yes, complete Form 50.

4. *Form 80 submitted? (1) (2) F80VII4

PART VIII: COORDINATION

1. Checked for completeness and accuracy:
- A. Certification number: - CERT_NO
- B. Signature: _____ CERT_SIG
- C. General Comments: GEN_CMNT

2. Neurological examiner certification number: - NCERT_NO

ID Number

--	--	--	--

Visit		Seq					
<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>				-	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>		