

INFANT NEURODEVELOPMENTAL ASSESSMENT

NAME:






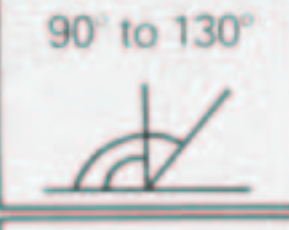
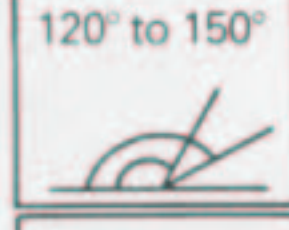
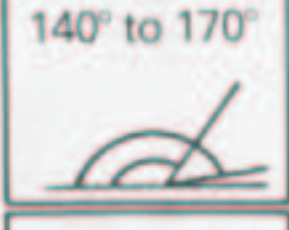
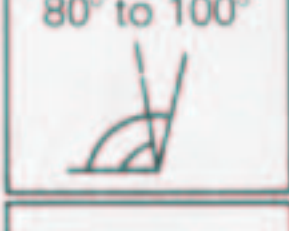
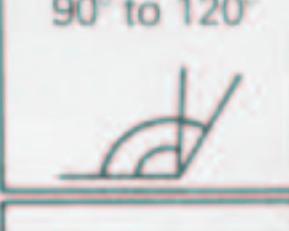
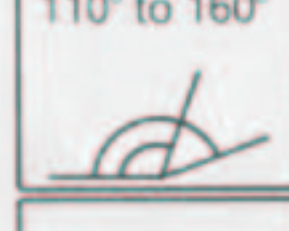
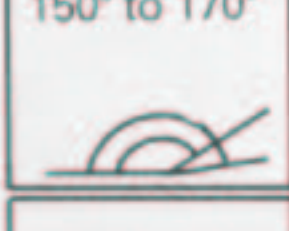
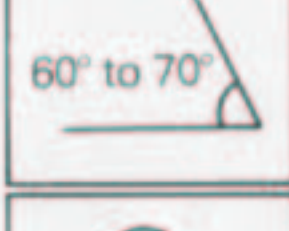
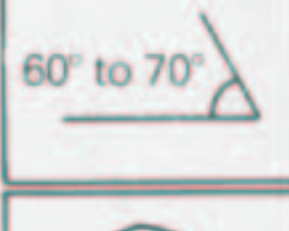
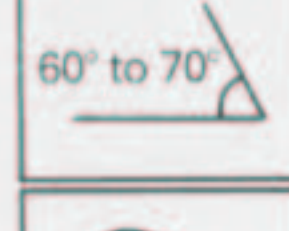
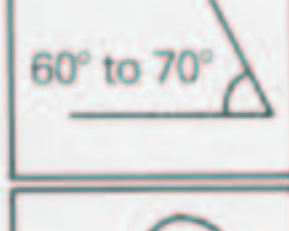




DATE OF BIRTH:

HOSPITAL NO.:

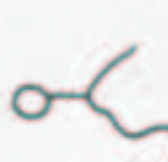
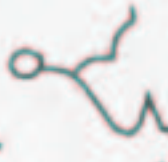

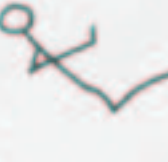







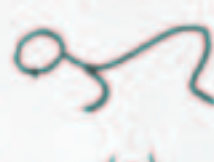
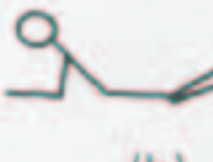




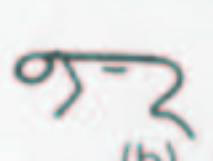





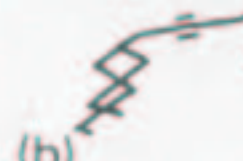

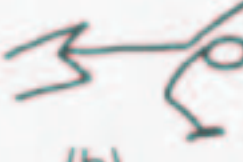

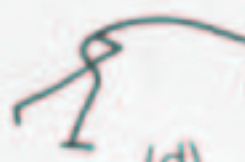
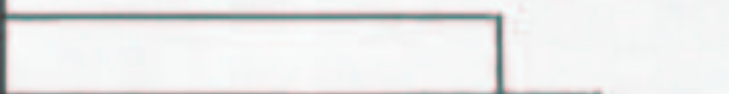

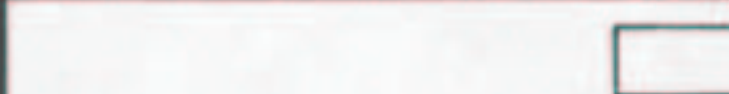


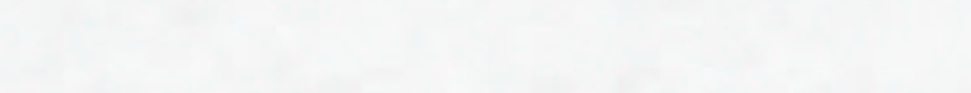

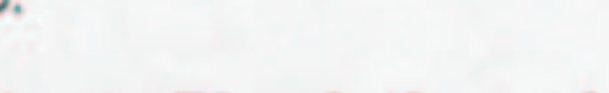
MONTHS

1 2 3 4 5 6 7 8 9 10 11 12

COMMENTS

	HEAD ASYMM	HEAD SYMM	LIFTS HEAD									
1) Supine lie												
ANGLES												
2) Adductor	40° to 80° 	70° to 110° 	100° to 140° 	130° to 150° 								
3) Heel to ear	80° to 100° 	90° to 130° 	120° to 150° 	140° to 170° 								
4) Popliteal angle	80° to 100° 	90° to 120° 	110° to 160° 	150° to 170° 								
5) Dorsiflexion of foot	60° to 70° 	60° to 70° 	60° to 70° 	60° to 70° 								
6) Scarf												

MONTHS 1 2 3 4 5 6 7 8 9 10 11 12

7) Pull to sit	 (a)  (b)  (c)  (d)
8) Sitting	 (a)  (b)  (c)  (d)  (e)  (f)  (g)
9) Prone lie	 (a)  (b)  (c)  (d)  (e)
10) Landau Response	 (a)  (b)  (c)
11) Axil hanging	 (a)  (b)  (c)
12) Vojta side tilting	 (a)  (b)
13) Collis Horizontal	 (a)  (b)  (c)  (d)
14) Hand grasp reflex	
15) Moro Response	
16) ATNR	
Protective Extension:	
17) Down	
18) Lateral	
19) Forward	
20) Backwards	

CONCLUSIONS:

Reproduced from PEDMED May/June 1990.

INFANT NEUROMOTOR ASSESSMENT (Refer to diagram)

Sitting on caregivers lap / supine: Test eye following. Hands to mouth.

1. **Supine:** Head asymmetrical = head turned to one side. Head symmetrical = head in midline.
Angles: Infant lies supine with head in midline.
2. **Adductor Angle:** Examiner opens legs as far as possible. The angle formed by legs is measured.
3. **Heel to Ear:** Buttocks on the table. The legs are kept straight and moved towards the ear. When there is resistance to this movement, the angle formed from table surface to legs is measured.
4. **Popliteal Angle:** Buttocks on the table. The legs are flexed to either side of the abdomen, until there is resistance. Then legs are extended. When there is resistance to this movement, the angle formed between the lower and upper leg is measured.
5. **Dorsiflexion Angle of the Foot:** The knee is extended. The foot is flexed and the angle between foot and leg measured.
6. **Scarf Sign:** The examiner takes infant's hand and pulls arm across chest, until there is resistance. The position of the elbow is noted. (P. Ellison)
7. **Traction** is applied to arms until trunk forms an angle of 45 degrees with the examination plane.
(a) Complete head lag with extended arms. (b) Moderate head lag. (c) Head in line with the trunk, the arms and legs are in flexion with the feet lifted. (d) The child actively flexes the head forward with strong elbow flexion. Knees go from flexion to extension.
8. **Sitting:** (c) Extension down to Lumbar 3. (g) Infant is able to rotate trunk sideways.
9. **Prone:** (b) Elbow flexion support. (c) Elbow extension support. Fisting in prone should cease at 3 1/2 months.
10. **Landau:**(a) Head flexed, trunk curved. (b) Head, cervical and thoracic regions extended forming one horizontal plane (sometimes head slightly above horizontal). (c) Extension of head above horizontal. Full extension of trunk and pelvis.
11. **Axillary hanging:** Infant is held vertically with back to examiner. Examiner holds infant just below axillae with feet free of the table. (a) No head control with legs in loose flexion. (b) Legs in strong flexion. (c) Preparation for weight bearing with extended legs. **Abnormal** pattern is scissoring or stiff extension of legs.
12. **Vojta side tilting:** Infant is held vertically with back to examiner. Infant is tilted into lateral horizontal position. (a) Moderate trunk flexion, morolike response in superior arm. Superior leg should flex with inferior leg extended. (b) Head and trunk righting, flexion of superior arm, flexion of both legs. **Deviant** signs are lack of trunk righting; stiff extension superior leg or both legs; stiff superior elbow extension or stiff elbow flexion with shoulder retraction.
13. **Collis horizontal:** Infant is in side lying with back close to examiner. The examiner's hands grasp over superior shoulder and hip joints to prevent stretching ligaments. Raise infant just off table. (a) Flexion of inferior leg and arm. (b) Inferior elbow extended with hand partially open touching table on ulnar side. (c) Elbow extended, palm supports body weight. (d) Inferior arm and leg down on table. **Deviant** signs are lack of trunk righting; stiff inferior leg extension; lack of weight bearing on inferior hand; stiff inferior elbow extension or flexion with shoulder retraction.
14. **Grasp reflex:** Place index finger in palm from ulnar side. Supine: grasp reflex should cease at 2 1/2 months.
16. **ATNR** (asymmetrical tonic neck reflex): Arm and leg on skull side should flex and on the face side extend. Can be assessed by turning head, or is observed when testing "following". This is not an obligatory response.
17. **Protective Extension - Down:** The child is held vertically and rapidly lowered. The infant should extend legs with abduction and external rotation to weight bear on flat feet. Persistent toe standing must be watched.
18. **Protective Extension - Lateral:** The child is placed sitting and is pushed sideways on one shoulder with sufficient force to make it lose balance. The opposite arm should abduct with extension of elbow and wrist to weight-bear. At 4½ months, prop sitting sideways is present.
19. **Protective Extension- Forwards:** The child is held vertically and tilted forwards to the table. The arms project forward with extended elbows, wrists and fingers.
20. **Protective Extension - Backwards:** The child sits and is pushed backwards. Both arms should extend backwards, although sometimes the reaction is only seen in one arm.