

CODING FOR BABY EXAMINATION

A GENERAL TONE

- 0 Hypotonic
- 1 Slightly floppy
- 2 Normal
- 3 Slightly hypertonic
- 4 Moderately hypertonic
- 5 Opisthotonic
- 6 Mixed tonicity

B INITIAL BEHAVIOURAL STATE

- 0 Eyes closed, regular respiration, no movements except startles
- 1 Eyes closed, irregular respiration, phasic eye and extremity movements may be present
- 2 Eyes opening and closing, eyes slit, drowsy
- 3 Eyes open, no gross movements
- 4 Eyes open, gross movements, no crying
- 5 Eyes open or closed, crying

C SPONTANEOUS MOTOR ACTIVITY

- 0 None
- 1 Few movements
- 2 Moderate number of movements
- 3 High moderate
- 4 Marked frequency, constant movement

Normal infants move their limbs in an alternating fashion. Many babies may appear jittery in state 5.

D POSTURE

E RESISTANCE TO PASSIVE MOVEMENTS

F TOTAL BALLARD NEUROMUSCULAR (D + E)

G VENTRAL SUSPENSION

- 0 Flaccid, head and extremities hanging down
- 1 Head hanging down but some flexion of the extremities
- 2 Transient lifting of head and semi-flexion of the extremities
- 3 Sustained lifting of head in line with trunk and extension of lower extremities (occasionally flexion of lower extremities is seen, but head and back are in line).

PULL TO SIT MANOEUVER

H

GRASP

- 0 Absent
- 1 Short, weak grasp
- 2 Moderate grasp
- 3 Supports weight, sustained grasp

J

TRACTION

- 0 No flexion, no resistance to extension of the arms
- 1 Slight flexion, then extension
- 2 Moderate flexion
- 3 Resistance to extension, semi-flexion maintained

K

HEAD LAG

- 0 No flexion, head hangs passively down
- 1 Slight intermittent flexion, rolling.
- 2 Moderate flexion, head remains in upright position for at least 3 seconds although oscillates slightly
- 3 Head remains in line with body

L

ABNORMAL NEUROLOGICAL FEATURES

- 1 High pitched cry
- 2 Extreme irritability or 'starry eyed' appearance
- 3 Abnormal posturing e.g. opisthotonos, excessive fisting, obligate furred thumbs
- 4 Generalised persistent hypotonia
- 5 Paucity of spontaneous movements
- 6 Asymmetrical movements

M

PHYSICAL MATURITY

N

MATURITY RATING

DYSMORPHOLOGICAL / PHYSICAL

1 EYES

- A ptosis
- B abnormal palpébral fissures
- C hypertelorism
- D epicanthic folds
- E blepharophimosis
- F telecanthus
- G abnormal irides
- H epibulbar dermoids
- J long lashes
- K absent lashes
- L eyebrows - inner missing
- M eyebrows - outer missing
- N synophrys (eyebrows meet)

2 NOSE

- A high nasal bridge
- B low nasal bridge
- C abnormal choanae
- D long nose
- E short nose
- F flat
- G thin
- H bulbous
- J anteverted
- K long philtrum
- L short philtrum

3 MOUTH

- A alveolar margin - hypertrophy
- B alveolar margin -tags
- C cleft palate
- D high palate
- E steeple palate
- F uvula - absent
- G uvula - bifid
- H submucous cleft
- J ridging
- K epulis
- L teeth - present
- M teeth - mesiodens
- N tongue - large
- P tongue - amputated
- Q frenulum
- R microstomia

4 LIPS

- A corners up
- B corners down
- C vermillion straight
- D vermillion thin
- E unilateral cleft
- F bilateral cleft
- G puckered

5 JAW

- A prognathism
- B hypognathism (receding)
- C fine (narrow / pointing)
- D square

6 MID-FACE

- A full
- B fat and puffy
- C flat
- D prominent

7 EARS

- A low set
- B rotated
- C pre-auricular tags
- D post-auricular tags
- E creased lobes
- F abnormal helix
- G abnormal tragus
- H pits
- J primitive shape
- K fistulae
- L asymmetry
- M satyr (pointed)

8 NECK

- A short
- B redundant skin
- C tumours
- D cysts
- E sinuses

9 SKULL

- A abnormal shape
- B large anterior fontanelle
- C small anterior fontanelle
- D third fontanelle
- E wide sutures
- F raised sutures
- G metopic suture
- H prominent forehead
- J broad forehead
- K prominent occiput

10 SCALP

- A boggy
- B deficiency
- C cephalhaematoma
- D laceration
- E chignon

11 HAIR

- A widows peak
- B double crown
- C low posterior hair line
- D low fore line
- E hirsute facies
- F electric hair

12 SKIN

- A excessive hair
- B abnormally rough
- C abnormally moist
- D naevi
- E stork marks
- F other haemangiomas
- G depigmented patches
- H hyperpigmented patches
- J increased autonomic variability
- K cutis marmoratum (marbling)
- L petechiae
- M jaundice (sclera)
- N bruising
- P bleeding
- Q pallor
- R plethora
- S puffiness
- T pustules
- V cyanosis - peripheral
- W cyanosis - central
- X erythema toxicum
- Y skin tags

13 PROMINENT DIMPLES

- A elbows
- B scapulae
- C ankles
- D acromium
- E knees
- F sacral
- G other

14 HANDS

- A abnormal nails
- B simian crease(s)
- C other abnormal creases
- D broad fingers
- E short fingers
- F tapered fingers
- G long thumbs
- H digitalised thumbs
- J single crease 5th (little) finger
- K single crease 2nd and 3rd finger
- L syndactyly
- M clinodactyly
- N camptodactyly
- P shortened metacarpals

15 FEET

- A displaced hallux
- B broad hallux
- C wide gap between toes
- D abnormal creases
- E syndactyly
- F prominent heels
- G shortened hallux

16 SPINE

- A swellings
- B spina bifida
- C kyphosis
- D scoliosis
- E sacral dimple
- F haemangioma over spine
- G Mongolian spot

17 JOINTS

abnormal range

- A - neck
- B - shoulders
- C - elbows
- D - wrists
- E - left hip
- F - right hip
- G - knees
- H - ankles
- unstable
- J - elbows
- K - wrists
- L - left hip
- M - right hip
- P absent patella(e)
- R talipes - right
- S talipes - left

18 THORAX

- A abnormal shape
- B short sternum
- C prominent sternum
- D sunken sternum
- E supernumery nipples
- F widespread nipples
- G abnormal clavicles

19 HEART / LUNG

- A heart murmur
- B absent femoral pulses
- C unequal air entry

20 ABDOMEN

- A abnormal shape
- B liver enlarged (>tipped)
- C spleen tipped
- D spleen enlarged
- E right kidney enlarged
- F left kidney enlarged
- G both kidneys enlarged
- H bladder enlarged
- J umbilical hernia
- K para-umbilical hernia
- L diastasis of recti
- M inguinal hernia

21 GENITALS (MALE)

- A right testis undescended
- B left testis undescended
- C right testis abn small
- D left testis abn small
- E abnormally short penis
- F hypospadias
- G redundant foreskin
- H abnormal rugae on scrotum
- J shawl scrotum
- K epispadias
- L hydrocele

22 GENITALS (FEMALE)

- A hypoplastic labia majora
- B hypertrophic clitoris
- C short rectovaginal distance
- D cysts
- E vaginal tags

NEONATAL EXAMINATION

Day of life: _____

Study No: _____

MEASUREMENTS:

Crown heel length: _____	Foot length: _____
Head circumference: _____	Crown length: _____
Chest circumference: _____	Abdominal circ.: _____

CONGENITAL ABNORMALITIES:

NEUROLOGICAL SIGNS: (Lasting > 1 day)

Irritable: Y / N	Excitable: Y / N
Lethargic: Y / N	Hypotonia: Y / N
Seizures: Time of Onset: _____	Duration: _____
Response to Rx: _____	

MEDICAL PROBLEMS:

Intra-cranial haemorrhage	Y / N
Hydrocephalus:	Y / N
Cerebral oedema:	Y / N
Pulmonary problems:	Y / N
Jaundice: Y / N	Bilirubin: _____
Sepsis: Y / N	_____
Cardiac failure: Y / N	_____
Hypoglycaemia: Y / N	_____
Oliguria: Y / N	_____
Haematuria: Y / N	_____
Bleeding at skin puncture sites:	Y / N
Blood in stools:	Y / N
Necrotising enterocolitis:	Y / N
Deranged autonomic function:	Y / N

BIOCHEMISTRY:.

Na: _____ K: _____ Ca: _____ Mg: _____

FEEDING:

Sucking: Good _ Average: _ Poor: _

Good feeding established: Y / N

CONFIDENTIAL

INFORMED CONSENT

I, agree to participate in this study which is an investigation of the relationship between growth and development of the baby before birth and subsequent progress in infancy and childhood.

I understand that I will be asked to assist in completion of a confidential questionnaire which will ask questions about my lifestyle and my medical history.

A shortened questionnaire will be provided for the father of the baby to complete.

On completion of the questionnaire I will be randomly allocated to one of two groups. If I am allocated to the 'Ultrasound only' group I will have an ultrasound scan performed at 18 weeks of pregnancy in order to be certain of the due date of my delivery. After this I will have regular antenatal care with further ultrasound examinations only as requested by my doctor.

If I am allocated to the 'Ultrasound and Doppler' group, I will have ultrasound examinations at 18, 24, 28, 34, and 38 weeks of pregnancy. At the same time, Doppler placental blood flow studies will be performed. These tests are entirely non-invasive and evidence shows that they are harmless both for me and for my baby. The results of these tests will be placed in my hospital notes and the doctors caring for me will be able to use the results for my management. Blood will be taken from me in the Ultrasound Department at 18 and 34 weeks of pregnancy. At delivery, a sample of blood will be taken from the placenta and the placenta will be examined.