



## **The 8 Step (10 minute) Chiropractic Examination of an Infant.**

Following this step-by-step procedure will enable you to examine the infant comprehensively in a structured, professional and time-efficient manner.

### **Step One - Prior to the examination: 1 minute**

- interact with the child to begin the bonding process – *Connect with the child, and the parents*
- have the parent undress the baby down to their nappy – *Examining through 3 or 4 layers is possible, but you may miss something important*
- place the child supine on the examination couch. *Make sure the child is safe and comfortable*

### **Step Two – Observe with the child supine: 30 seconds**

- tone – *Is the child floppy? (Potential indicator of hypotonia)*
- torsional posture – *Is the child lying in a 'C-curve'? May indicate the presence of dural tension*
- facial symmetry, fullness and movement - *Cranial Nerve 7*
- orbits of the eyes, symmetry of the nostrils, shape of the nose and glabella
- jaw and mouth symmetry
- symmetry of the frontal bone
- depression of the greater wing of the sphenoid
- skull symmetry – *The previous 5 points are all to check for potential cranial issues. What you observe can give you important clues as to the cranial issues which may be present.*
- quality and strength of cry – *Cranial Nerves 9 and 10*
- strength and symmetry of dummy sucking - *Cranial Nerves 5,7,9,10,11 and 12*

- response when gag reflex is elicited, (you would only perform this if you have *specific* concerns) - *Cranial Nerves 9 and 10.*
- response when clap test is performed - *Cranial Nerve 8.*
- response when child's nostrils are pinched - *Cranial Nerve 12.*

### **Step Three - Initial palpation: 30 seconds**

- tone – *again looking for any evidence of hypotonia*
- anterior and posterior fontanelles – *open or closed and is this within normal age limits?*
- sutures – *looking for asymmetry or ridging .*
- cranial vault symmetry - *looking for asymmetry, evidence of which may indicate potential cranial issues or plagiocephaly.*
- rooting reflex – *Primitive reflex*
- sucking reflex - *Primitive reflex*
- assess suck (using finger cot) – *Further assesses Cranial Nerves 5,7,9,10,11 and 12, as well as beginning your cranial examination*

### **Step Four - Supine examination: 2 minutes**

- knee jerk reflex – *Muscle spindle reflex*
- ankle jerk reflex - *Muscle spindle reflex*
- biceps reflex - *Muscle spindle reflex*
- triceps reflex - *Muscle spindle reflex*
- plantar reflex - *Muscle spindle reflex.*
- palmer grasp reflex - *Primitive reflex.*
- plantar grasp reflex - *Primitive reflex*
- Ortolani's test - *Orthopaedic test for hip - may indicate CHD.*
- Barlow's test - *Orthopaedic test for hip - may indicate CHD.*
- leg length – *may indicate CHD, or other biomechanical issues.*
- pupil when penlight is shined into it - *Cranial Nerve 2*
- response when 'doll's eye' test with penlight is performed - *Cranial Nerve 3,4 and 6.*
- 'pull to sit' test - *Primitive reflex.*
- Moro reflex - *Primitive reflex*
- Asymmetric tonic neck reflex - *Primitive reflex*

- Tonic labyrinthine reflex - *Primitive reflex*

**Step Five – Examinations to perform in the process of moving the child into the prone position: 2 Minutes**

- horizontal suspension reflex - *Primitive reflex.*
- Galant reflex - *Primitive reflex.*
- vertical suspension reflex - *Primitive reflex.*
- placing reflex - *Primitive reflex*
- walking reflex - *Primitive reflex.*
- positive support reflex (age related) - *Postural Reflex.*
- Landau reflex (age related) - *Postural Reflex*
- parachute reflex (age related) - *Postural Reflex*

**Step Six - Prone examination: 1 minute**

- leg length - *may indicate CHD, or other biomechanical issues*
- squeeze buttocks - *identifying a potential sacral subluxation*
- symmetry of the skinfolds - *may indicate CHD*
- grasp legs and motion palpate: - *chiropractic spinal examination (obviously a very important part of the examination)*
  - lumbosacral region
  - lumbar spine
  - lower thoracic spine
  - sacrum
  - sacroiliac joints

**Step Seven - Sitting examination: 1 minute**

- lateral propping (age related) - *Postural Reflex.*
- Anterior Propping – *Postural Reflex*
- posterior propping (age related) - *Postural Reflex.*
- motion palpate: - *chiropractic spinal examination*
  - lumbar and lower thoracic region (alternate procedure to prone motion palpation)
  - mid to upper thoracic spine

- C2 to approximately T2/T3
- upper cervical complex:

**Step Eight - Cranial examination – Depending on your findings thus far will determine how comprehensive your cranial examination needs to be – usually under 2 minutes (but can be as long as 10 minutes depending on the infant)**

- examine for dural tension
- evaluate cranial base mobility in flexion and extension
- evaluate for laterality or torque at the cranial base
- examine the sutures more extensively.