



Perinatal Manual of Southwestern Ontario

Southwestern Ontario Maternal, Newborn, Child & Youth Network (MNCYN)

Perinatal Outreach Program

Chapter 23

NEWBORN PHYSICAL ASSESSMENT

“The baby should have a complete physical examination within 24 hours of birth, as well as within 24 hours before discharge”.

*Family-Centred Maternity & Newborn Care:
National Guidelines 2000*

Principles of Examination

1. Provision should be made to prevent neonatal heat loss during the physical assessment.
2. A rapid overall assessment of the baby will be done at the time of birth, with a more detailed assessment completed on admission.
3. Where possible, the parents should be present during the assessment.
4. Sequence of examination include:

Examples

Inspection

- Body proportion
- Posture
- Skin
- Amount of subcutaneous fat
- Facial appearance
- Respirations
- Sleep state
- Movement
- Responsiveness

Auscultation

- Heart
- Lungs

Palpation

- Cranium
- Peripheral pulses
- Abdomen, liver, spleen, kidneys

Neurologic Reflexes

- Suck / root
- Moro
- Grasp
- Babinski

Other

- Eyes - Red reflex
- Measurement
 - Vital signs, including BP and Mean Arterial Pressure (MAP), which should be at least equal to gestational age

(For clarity sake, the following head-to-toe assessment will be grouped in an organized fashion indicating common normal findings, as well as abnormalities).

Area	Normal	Abnormal
Head	<ul style="list-style-type: none"> • Molding • Overriding sutures • Caput succedaneum 	<ul style="list-style-type: none"> • Cephalhematoma • Fracture • Sutures fused • Fontanelle <ul style="list-style-type: none"> ○ Full ○ Depressed
Face	<ul style="list-style-type: none"> • Normal configuration 	<ul style="list-style-type: none"> • Abnormal facies • Mandibular hypoplasia • Forceps injury • Facial palsy <ul style="list-style-type: none"> ○ Partial

Area	Normal	Abnormal
		○ Complete
Eyes	<ul style="list-style-type: none"> • Symmetrical • Open • Red reflex 	<ul style="list-style-type: none"> • Asymmetry • Subconjunctival hemorrhage • Cataracts • Coloboma • Conjunctivitis • Brushfield spots
Nose	<ul style="list-style-type: none"> • Symmetrical 	<ul style="list-style-type: none"> • Nasal flaring • Choanal atresia
Ears	<ul style="list-style-type: none"> • Normal configuration • Response to sound 	<ul style="list-style-type: none"> • Abnormal configuration • Low set • No response to sound • Forceps injury • Accessory auricle(s) / tags
Mouth	<ul style="list-style-type: none"> • Normal configuration • Epstein's pearl 	<ul style="list-style-type: none"> • Cleft lip/palate • Precocious teeth • Glossoptosis • Not tongue tied
Neck	<ul style="list-style-type: none"> • Normal mobility 	<ul style="list-style-type: none"> • Webbing • Masses
Chest	<ul style="list-style-type: none"> • Two nipples • Enlarged breasts • Normal respirations (40-60 breaths/minute) 	<ul style="list-style-type: none"> • Extra nipples • Breast abscess • Apnea • Cyanosis • Retractions • Tachypnea • Grunting

Area	Normal	Abnormal
	<ul style="list-style-type: none"> • Normal breath sounds • Normal heart rate • (110-160 beats/minute) • Peripheral pulses equal to apical 	<ul style="list-style-type: none"> • Diminished air entry • Crackles/wheezes • Arrythmia • Murmur • Tachycardia • Bradycardia • Peripheral pulses differ from apical • Bounding or faint peripheral pulses
Abdomen	<ul style="list-style-type: none"> • Slight protrusion • 3 umbilical vessels • Cord drying • Normal palpation (Liver 2 cm below costal margin) • Bowel sounds present 	<ul style="list-style-type: none"> • Convex • Distended • 2 vessels • Umbilical inflammation, drainage • Enlarged <ul style="list-style-type: none"> ○ Liver ○ Spleen ○ Kidneys • Bowel sounds absent
Skin	<ul style="list-style-type: none"> • Vernix • Pink colour • Acrocyanosis • Milia • Erythema toxicum • Telengiectatic nevi 	<ul style="list-style-type: none"> • Jaundice • Cyanosis • Pallor • Petechiae • Bruising • Strawberry hemangioma

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Area	Normal	Abnormal
	<ul style="list-style-type: none"> • Mongolian spots 	<ul style="list-style-type: none"> • Port wine stains
Genitalia Female	<ul style="list-style-type: none"> • Normal configuration • Mucousy vaginal discharge • Pseudo menstruation 	<ul style="list-style-type: none"> • Abnormal configuration
Male	<ul style="list-style-type: none"> • Normal configuration • Testes in scrotum • Hydrocele 	<ul style="list-style-type: none"> • Hypospadias • Epispadias • Undescended testes
Anus	<ul style="list-style-type: none"> • Patent 	<ul style="list-style-type: none"> • Imperforate anus • Fistula • Patulous
Extremities Arms, Legs, Hands, Feet	<ul style="list-style-type: none"> • Normal 	<ul style="list-style-type: none"> • Abnormal • Fractures • Paralysis • Weakness • Polydactyly • Syndactyly • Abnormal skin creases
Hips	<ul style="list-style-type: none"> • Range of motion adequate • Click 	<ul style="list-style-type: none"> • Congenital hip dislocation • Clunk
Spinal Column	<ul style="list-style-type: none"> • Normal 	<ul style="list-style-type: none"> • Sinus • Mass • Myelomeningocele

Extremities Neurologic Exam	<ul style="list-style-type: none"> • Normal activity • Normal tone • Normal DTRs • Primitive reflexes present (Suck, Root, Moro, Step, Place) • Ventral suspension, Head lag 	<ul style="list-style-type: none"> • Hypotonic • Hypertonic • Jittery • Seizures
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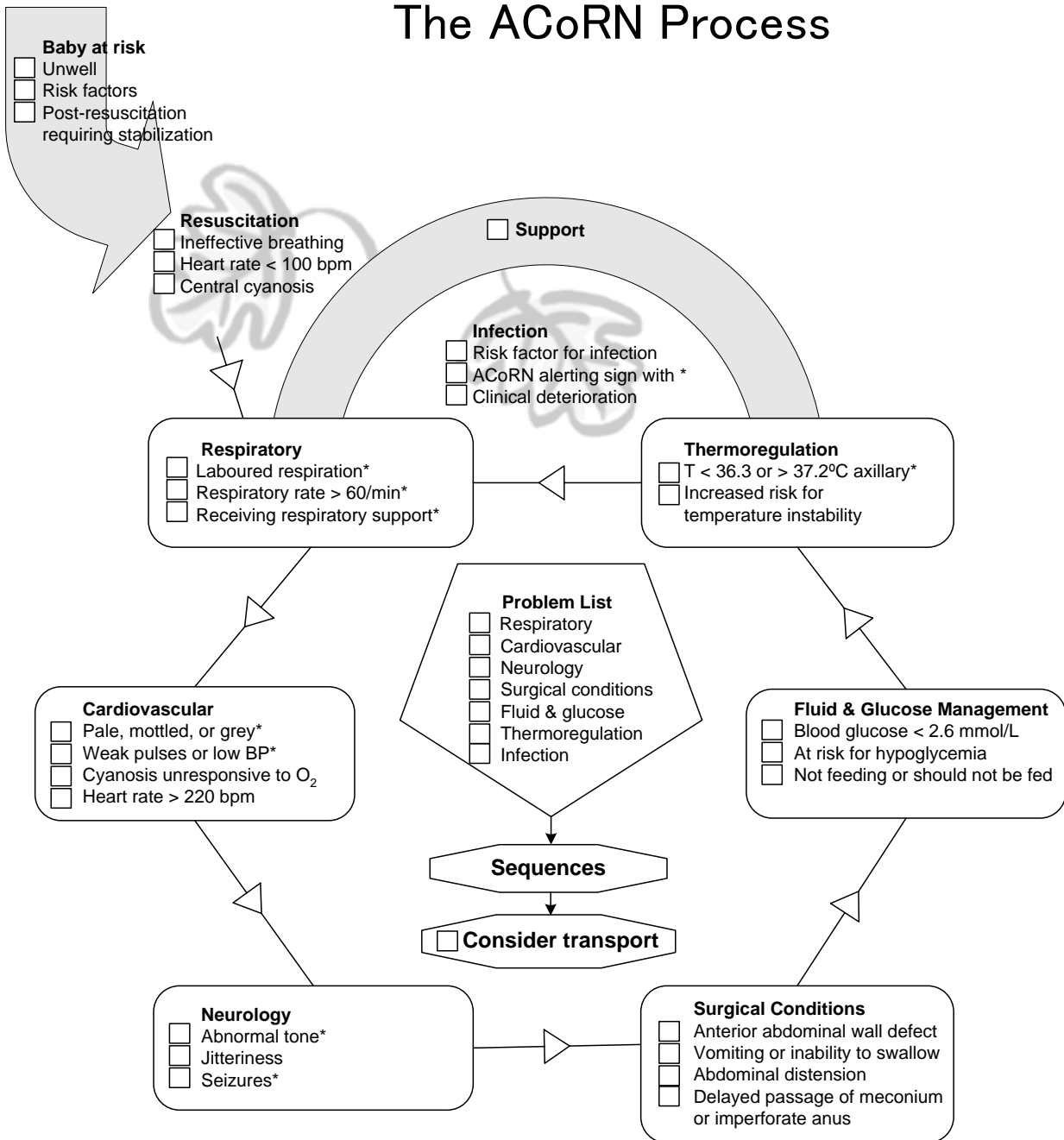
Charting

1. A checklist format is recommended for ease of charting.
2. The birth weight, length and head circumference should be plotted against gestational age to identify disparities and those babies who are large, appropriate, or small for dates.
3. Another way of assessing the baby's well being and to organize care is to use the Primary Survey from the ACoRN Manual.

References:

1. A. Solimano, MD, FRCPC et al; ACoRN, Acute Care of at-Risk Newborns; First edition, Revised August 2012

The ACoRN Process



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