


**Assessment of the Newborn**  
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**Assessment of the Newborn Begins with the Assessment of the Mother**



- Age
- Social Factors
- Past Medical History including menstrual and fertility accounts
- Relevant Family History
- Current Health Status
- Physical & Laboratory Exams including infectious disease screening

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**Objectives**

- State in sequence the components of the physical assessment of a normal newborn
- Identify the assessment criteria for each component of the physical assessment
- Discuss the assessment findings including common variations for a normal newborn
- Identify a minimum of 5 reflexes exhibited by a newborn
- Describe the procedure for gestational age assessment

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### Gravity and Parity

G Gravidity	T Term Births	P Preterm Births	A Abortions and Miscarriages	L Living Children	Two Digit G/P
Three past and one current Pregnancy  4	(2 children each born at 40 weeks)  2	(Twins conceived – one LFD at 20 weeks, Survivor born at 28 weeks)  1	0	3	G4P3
(Three past and one current Pregnancy)  4	(2 children born at 40 weeks)  2	(Twins conceived and born at 28 weeks)  2	0	4	G4P3

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### Ongoing Assessment of Mom and Baby throughout Pregnancy

- Assessment of growth patterns and fetal well-being
- Genetic Screening
- Ultrasound
- Maternal Serum Alpha-Fetoprotein Screening (MSAFP)
- Amniotic Fluid levels
- Ongoing appraisal of social issues and infectious disease risks
- Indications of Maternal Health and well-being




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### Continued Assessment of Mother and Baby Throughout Labor & Delivery

- Maternal
  - Wellness
  - Labor patterns
  - Selection of Analgesia
  - Fever
  - ROM




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### And Delivery



- Fetal
  - Presentation
  - Fetal Heart Rate patterns
  - Meconium

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### APGAR Score

5 category system each worth 2 points. Higher than 7- baby is doing well. Less than 7- baby is struggling.

Taken at 1 minute to determine how well the baby tolerated the birthing process and at 5 minutes to determine how well the baby is transitioning.

- A- appearance
- P- pulse
- G- grimace
- A- activity
- R- respirations

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### Physical Assessment – Skin



Pink Color- Normal



Flaking

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Physical Assessment – Skin



Dusky

Acrocyanosis



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Forceps marks & Facial Bruising



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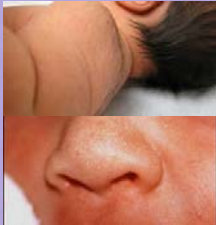

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Lanugo, Milia, Mottling



ADAM

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Vernix



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Jaundice & Erythema Toxicum



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Skin Discolorations: Mongolian spots



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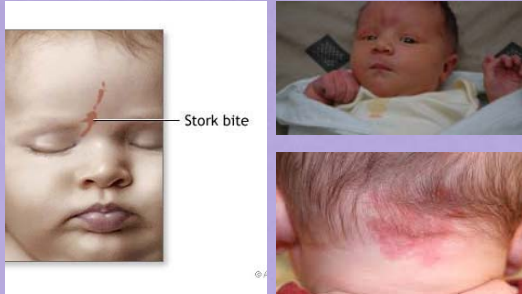
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Skin Discolorations: stork bites,



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Petechiae, Hemangioma, & Portwine Staining



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Albinism, Pale ocular fundus of Albinism, & Pigment concentration in Infant of Color



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### Nevus Sebaceous



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### Café au lait spots



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### Skin tags



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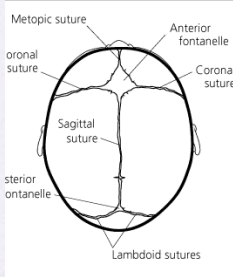
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### Physical Assessment: The Head (Cranial Sutures, Fontanelles, & Measurement)



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### Hydrocephaly and Microcephaly



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### Caput Succedaneum & Cephalohematoma



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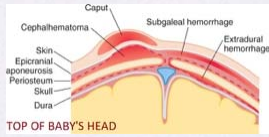

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### Subgaleal Hemorrhage & Breech Head



TOP OF BABY'S HEAD

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### Physical Assessment: The Eyes Edematous Lids, Subconjunctival Hemorrhage

May Fix on objects

May follow moving object to midline

Absence of Tears

Irises: Dark Blue, Brown, Slate Gray



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### Up-slanting Palpebral Fissures

Also look for bilateral red reflex.

Be alert to cloudy corneas (congenital glaucoma) or cloudy pupils (congenital cataracts)



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### Physical Assessment: Ears

Loud Noise Elicits Startle Reflex

Normal finding - top of pinna horizontal to outer canthus of eye

Pinna Well formed, Flexible, and Cartilaginous



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### Variations: Ear Pit, Microtia, Stahl Ear



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### Ear Tag & Hypoplastic Low Set Ear



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Physical Assessment:  
The Nose



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Physical Assessment: The Mouth  
Normal mouth & tongue, variations



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Variations – Bohns Nodules (Epstein  
Pearls), Enlarged Salivary Glands



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Milk Tooth, Ankyloglossia (Tongue tie),  
Post Clipping



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Cleft Lip and Palate



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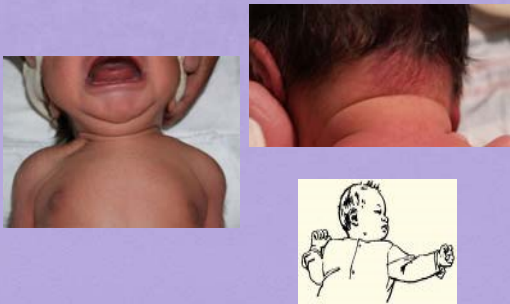
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Physical Assessment –  
Neck



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## Physical Assessment Chest

Normal – slight barrel shaped with equal AP A& Lateral diameters

Assess for breath sounds & PMI

Assess for heart rate, rhythm, presence of murmur

Prominent ziphoid process

May have accessory nipple



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Enlarged breast tissue, excessive barrel chest, intercostal retractions



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## Physical Assessment - Abdomen

Liver: 1-3 cm below Rt. Costal margin

Kidneys – locate umbilicus – measure 1-2 cm above and to the sides bilaterally

Bowel sounds?

Three Vessel Cord?



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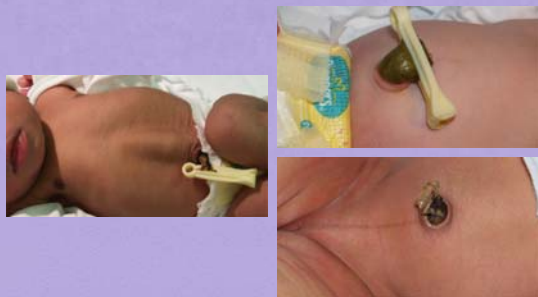
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### Variations



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### Bottoms Up!



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### Physical Assessment - Hips



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Physical Assessment - Back



The block contains four photographs. The top-left photo shows the upper back of a newborn. The top-right photo shows the lower back and waist area. The bottom-left photo shows the buttocks with a finger pointing to a specific area. The bottom-right photo shows the buttocks from a different angle.

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Physical Assessment - Extremities



The block contains four photographs. The top-left photo shows a close-up of a newborn's hand. The top-right photo shows both feet of a newborn. The bottom-left photo shows both feet being held. The bottom-right photo shows both feet being held from a different perspective.

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ROCKER BOTTOM FOOT, CLUB  
Foot



The block contains two photographs. The left photo shows a rocker bottom foot. The right photo shows a clubfoot.

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### Physical Assessment - Genitalia



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### Physical Assessment - Genitalia



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### Normal Term Female Appearance, Hymeneal Orifice, Hymeneal tag

(Where are the examiners gloves?)



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## Neurological Assessment

- Reflexes
  - Rooting
  - Sucking
  - Palmar and Plantar Grasps
  - Moro Reflex
  - Babinski reflex
  - Walking Reflex

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## Neurological Assessment: Tone

- Tone & Habituation
- Flexion
- Resistance
- Leg recoil
- Head Lag
- Vertical Suspension

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## Estimation of Gestation Age: Ballard

	-1	0	1	2	3	4	5
Posture							
Square Window							
Arm Recoil							
Palmar Angle							
Scarf Sign							
Heel to Ear							

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Square Window, Popliteal Angle, Scarf Sign, Heel to Ear.




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SIGN	SCORE					SIGN SCORE	
	-1	0	1	2	3		4
Skin	Sticky, fragile, translucent ant	gelatinous, red, translucent ant	smooth pink, visible veins	superficial peeling for rash, few veins	cracking, pale areas, rare veins	perthment, deep cracking, no vessels	leathery, cracked, wrinkled
Lanugo	none	sparse	abundant	thinning	hairless areas	mostly bald	
Plantar Surface	heel-toe ab-50mm -1 no crease -2	>50 mm no crease	faint red marks	anterior transverse crease only	crosses ant. 2/3	crosses over entire sole	
Breast	imperceptible	barely perceptible	flat areola no bud	stippled areola 1-2 mm bud	raised areola 3-4 mm bud	full areola 5-10 mm bud	
Eye / Ear	lids fused loosely -1 slightly -2	lids open pinna flat stays folded	sl. curved pinna, soft, slow recoil	well-curved pinna, stiff but ready recoil	formed & firm instant recoil	thick cartilage ear stiff	
Genitals (Male)	scrotum flat, smooth	scrotum empty, faint rugae	testes in upper canal, rare rugae	testes descended, pig, fair rugae	testes down, good rugae	testes pendulo in deep rugae	
Genitals (Female)	clitoris prominent penis at & labia flat	prominent clitoris & small labia minora	prominent clitoris & enlarged g minora	majora & minora equally prominent	majora large, minora small	majora cover clitoris & minora	
TOTAL PHYSICAL MATURITY SCORE							

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TOTAL SCORE (NEUROMUSCULAR + PHYSICAL)	WEEKS
-10	20
-5	22
0	24
5	26
10	28
15	30
20	32
25	34
30	36
35	38
40	40
45	42
50	44

References : Ballard J.L., Khoury J.C., Wedig K, et al. New Ballard Score, expanded to include extremely premature infants. J Pediatrics 1991; 119:417-423.

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Skin, Lanugo, Heel Creases,  
Nipples



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Eyes, Ears, Testes, Labia Majora  
and Minora



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Assessment of the Newborn -  
Measurements

- Weight
- Head Circumference
- Chest Circumference
- Length
- Vital Signs



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Lastly – Plot out your measurements  
against your Ballard score

- Small for Gestational Age?
- Average for Gestational Age?
- Large for Gestational Age?
- Microcephaly?
- Macrocephaly?

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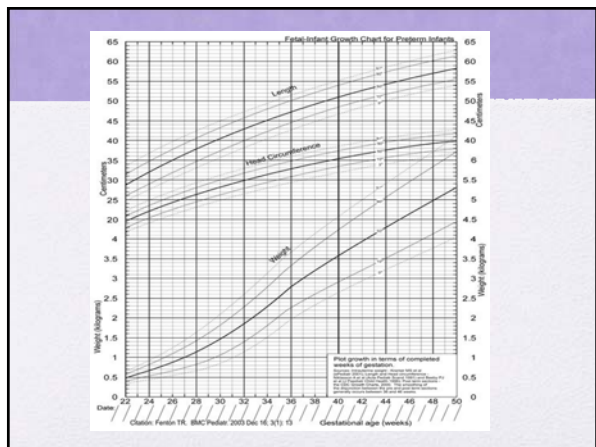
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*Any Questions?*

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- Lowdermilk, D., Perry, S. (2007). *Maternity & Women's Health Care* (9<sup>th</sup> ed.). St. Louis, MO: Mosby.
- Jarvis, C. (2004). *Physical Examination & Health Assessment* (4<sup>th</sup> ed.). Philadelphia, PA: W.B. Saunders Company.

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