

BIRTH

http://biology.clc.uc.edu/fankhauser/Labs/Anatomy_&_Physiology/A&P203/Reproductive_Sys_Anat/Birth_Videos/Birth_Videos.html

rvsd 31 May 2012

Nagele's rule: subtract 3 mo from day of last period, add 7 days. 10% on day, 50% within week

Perineum: Check ischial tuberosities for width of birth canal
Pubic symphysis softens in last month or so

INDICATORS DURING PREGNANCY:

Skin pigmentation "mask-like" on face, dark line on abdomen center, areolas darken
Maternal Blood Pressure should not rise above 130/90
"Lightening" ~two days before delivery, head engaged in canal, easier to breathe
Presentation check for location of fetal heart beat (ticking watch)
above navel is breech... CAUTION
below navel is occipital

STAGES OF LABOR: Triggered by stretching of uterus, estrogen, cervix distortion, oxytocin

- 1) **DILATION OF CERVIX** : regular contractions, relatively mild
 - a) Takes 10-20 hrs, expressed in cms (10) or "fingers" (4) (palpate rectally)
 - b) Do not push hard, can rupture cervix, hemorrhage. Head makes good wedge. The four cranial bones can move, accommodate to shape of birth canal; fontanelles
- 2) **DELIVERY OF BABY:** "Show" of blood tinged mucus as cervix is opened (1-2 hours, longer with epidural) (fetal monitor? Increases caesarean frequency)
 - a) **crowning:** top of head first appears at vaginal orifice.
Massage perineum to prevent tearing (hospitals do **episiotomy** [vulva cut])
 - b) head is born (largest part)
 - c) shoulder, arm, then body quickly slides out
- 3) **DELIVERY OF PLACENTA, MEMBRANES:**
 - a) Place baby at breast to stimulate release of oxytocin, stimulating contractions
 - b) do not cut umbilicus until blood has drained into infant
 - c) check placenta to ensure that it is entire (if pieces remain: bleeding and poss. infection)
- [4) **"fourth stage"** four hours *post partum* to look for hemorrhage, BP problems in mother]

Vernix: prevents bacterial infections and cracking skin. Leave much of it on baby.

APGAR SCORES: (Merck Manual, p 2286) 7-10 at 5 min is normal, 0-3 is low

points:	0	1	2
color	blue	extremities blue	pink
respiration	none	slow, irreg	crying
heart rate	none	<100 bpm	>100 bpm
reflexes (nasal)	none	grimace	sneeze, cough
muscle tone	limp	some flexion	active

Meconium ["poppy juice"] (mass of cells and bile stored in colon, discharged after birth).

Importance of Breast Feeding

- 1) **Colostrum:** rich in antibodies, deliver maternal Ab to infant, creates passive immunity.
- 2) Special composition of human milk (*see my web page*):
http://biology.clc.uc.edu/fankhauser/Cheese/milk_content.htm
 - a: Human milk has about **1/3rd as much protein** as either cow or goat.
 - b: Human milk has **twice the carbohydrate** as either cow or goat
 - c: Human milk has **1/4th the phosphorous** as either cow or goat
 - d: Human has **five times the of vitamin C**. This is not surprising, since of these three species, only humans cannot make vitamin C