

Tutorial : Fetal development, 29th April 2014

Group1

A woman you will be caring for during her pregnancy attends her booking in visit. Her last menstrual period was on the 17th February, 2014. She reports that her periods are regular/28 day cycle. She is still experiencing nausea and vomiting.

1. Calculate her expected date of birth:

Negle's rule: LNMP (17) +7 days + 9 months= 24/11/2014

2. What development period does her pregnancy falls within?

Approx 12 weeks fetus

3. She asks if her baby would have all its organs yet, and is worried about its development.

How will you answer her?

29th April- 17th Feb = 71 days = 10.14 weeks

Already development of:

- brain
- upper and lower limb
- eyes
- ear
- heartbeat

See lecture Human Development Timeline:

Determining fetal age : calculated first day from LMP

Fertilization age : when you conceive

eg. Woman is 6 weeks pregnant, embryo is 4 weeks old because of the gap of last menstrual period (LMP) to fertilization

First trimester :Fertilization → Conceptus: 1-2 week →Embrionic : 3-11 weeks
→Fetal growth : 9-12 week

Teratogenic effects : the blue graph indicating the organs are still in risky time of human congenital abnormalities

4. What is the size of her baby and where will her uterus be?

10cm fetus

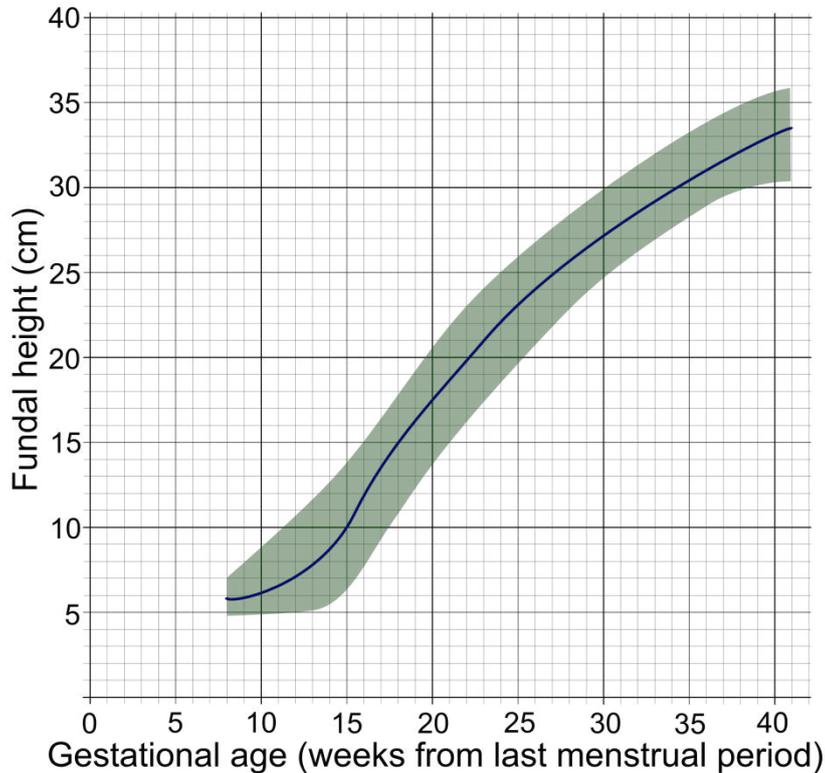
Uterus above pubic symphysis

Group2

A woman you are caring is 24 weeks pregnant.

1. Where would you expect her fundal height to be?

Umbilical-24cm



2. She has had a morphology scan, you check the results and there are no abnormalities reported. Which major organs completed development?

Everything (lung ready in 24 weeks, uterus muscle ready, etc) except for brain.

3. She is concerned about having her baby early as her sister had a premature baby. She asks if her baby is born now, can it survive. How will you answer her?

50% survival rate, use steroid injections for the fibrotic lungs (resistance), gastro problem (stomach can't digest yet)

4. Why, under normal circumstances, does the uterus not contract too early during pregnancy?

So that the baby will not be born too early before ready.

Physiological reason: oestrogen level constantly increasing and progesterone release → sensitivity, stimulate contraction

In order for muscle to contract, need to reach threshold → Induction of labor

If water break, baby can be born premature to avoid infection.

Sexual intercourse can trigger contraction.