What triggers the onset of parturition?

The fetus/fetal stress that allows for a release of adrenal corticotrophin (ACTH) released by the anterior pituitary.

What does ACTH stimulate the fetal adrenal cortex to produce and secrete? Corticoids

What removes the "progesterone block" and increases reproductive tract secretions? Fetal corticoids

What are the stages of the parturition process?

Stage 1- myometrial contractions (dilation of cervix occurs, hips sink in, etc.)

Stage 2- expulsion of fetus (entry of fetus in birth canal, OT release, etc.)

Stage 3- expulsion of fetal membranes

Longer than _____ hours is considered dystocia

- a. 24
- b. 5
- c. 2
- d. 12

What are causes of dystocia?

- a. Excessive size of fetus
- b. Failure to proper fetal rotation
- c. Multiple births
- d. None of the above
- e. All of the above

What are a few ways you can artificially induce parturition? Give ACTH, Corticosteriods (Dexamethasone), PGF2a, Oxytocin

What are the reasons of artificial induction of parturition? Time parturition to decrease labor \$\$, avoid dystocia

What events occur just before parturition?

Pelvic ligaments soften, cervix softens and begins stringing, swelling of vulva, udder swelling, fetus moves into proper position

Causes of retained placenta:

- Infections caused between cotyledon and caruncle
- Calving stress
 - Twins or calving difficulty
 - Edema of cotyledon → will not separate from caruncle
- Weak uterine contractions → villi will not shrink
- Milk fever → low Ca

Care for retained placenta:

- DO NOT manually remove from uterus → uterine damage greater than infection of retained placenta
- Mare = do NOT pull placenta
 - Vet will need to clean out if fully intact
- Cattle = treat with PGF2a or OT to expel
 - Infuse uterus with tetracycline and systemic injections of penicillin until placenta passes
- Prevention → vaccinate for Brucellosis and Leptospirosis; maintain Vitamin A, E, and selenium at appropriate levels in diet

Uterine Involution means... uterine healing

The caruncle is repaired by ~ 30 days post calving.

What do cattle pass 1-2 weeks after calving? What is it made up of? Lochia; mucus, blood, fetal membranes, and surface caruncle

Uterus is completely healed by $^{\sim}45$ day postpartum. 80 to 90 % of involution is complete by day 6 after parturition.

What can enhance involution of the uterus? Why?

Suckling because of the OT release by estrus periods that increase E2

For a foal heat, approximately how long after parturition can a mare have good fertility if there is no problem with uterine involution?

10-15 days

When is a sow able to express a standing heat after parturition? Is there ovulation? 7 days; NO ovulation