

What contractions continue after parturition? Why?

- Strong myometrial contractions ; to expel fetal membranes, compress uterine vasculature, reduce overall size of uterus

In most species, what stimulates oxytocin secretion?

- Postpartum suckling

What are some events that occur during uterine repair at the caruncular sites?

- Early necrotic changes in septal mass of caruncle (first 48 hrs)
- Vasoconstriction of caruncle blood vessels (day 2)
- Sloughing of necrotic material (by day 5 postpartum)
- Small blood vessels protrude from surface of caruncles (Day 10 - 15)
- Sloughing is complete (by day 15 postpartum)

What causes caruncle necrosis?

- Cell homicide caused by trauma so there is swelling, a metabolic collapse, and membrane integrity loss.

The regeneration of epithelium between caruncles is a \_\_\_\_\_ process

- Extremely slow
- Rapid**
- Moderate
- None of the above, there is no regeneration of the epithelium

Between day 1 – 14 postpartum, \_\_\_\_ to \_\_\_\_\_ % of cows have metritis. (swelling of uterine walls)

- 25 to 30%
- 25 to 75%
- 25 to 26%
- 25 to 40%**

What promotes leukocytes in the uterus after parturition (due to there being normal postpartum events to eliminate bacteria)?

- Estradiol (E2)

When does a sow have there 1<sup>st</sup> fertile estrus after parturition?

- After weaning

Do they tend to have an infertile estrus, if so, when?

- Yes, 3-10 days postpartum

When does an ewe have there 1<sup>st</sup> fertile estrus after parturition?

- 40 days postpartum

Do they tend to have an infertile estrus, if so, when?

- Yes, 21 days postpartum

When does a mare have there 1<sup>st</sup> fertile estrus after parturition?

- 45 days postpartum

Do they tend to have an infertile estrus, if so, when?

- Yes, a foal heat 5 – 15 days postpartum

When does a cow have there 1<sup>st</sup> fertile estrus after parturition?

- Dairy : 30 – 40 days postpartum
- Beef : 40 – 60 days postpartum

What are factors that influence the involution process?

- Age
- Season of year
- Nutrition
- Periparturient abnormalities
- Delayed return to cyclicity increase involution

Name strategies for improving uterine involution:

- Provide a balanced diet (fat supplementation, diet rich in energy and crude protein (11% or higher, high Ca and vitamin D)
- Careful surveillance and assistance at birth (check-ups, interventions at calving but not in excess)
- Prevention of postpartum diseases (use of OT (1<sup>st</sup> day postpartum), Methy Ergometrin (a vasoconstrictor) day 2, exogeneous hormones to “kick start” cyclicity (2<sup>nd</sup> or 3<sup>rd</sup> week))
- Early diagnosis and treatment of postpartum uterine abnormalities (retained placenta, puerperal metritis, clinical metritis, clinical endometritis)

Mammary glands are specialized...

- a. Sweat glands
- b. Nerve endings
- c. Hair follicles
- d. Shoot, I really don't know..

Milk ejection does not mean....

- a. Milk ejection
- b. Milk secretion
- c. Whole milk
- d. Well, you got me on this one, they all sound correct...

Colostrum provides passive immunity.