

Beginning Obstetrics

Gina Pedersen, DVM

Goat Education Day 2011

Overview:

- ✘ Labor
 - + Signs and behaviors
 - + Stages
- ✘ Dystocia
 - + What is it and why does it happen
- ✘ Obstetrics
 - + Basic principles
 - + Repositioning limbs
 - + Abnormal presentations and how to fix them
 - + When to call for help
- ✘ Aftercare

Labor

- ✘ Initiated by the FETUS
- ✘ Stages of labor
 - + Stage I – Dilation of the cervix and positioning of the fetus
 - + Stage II – Delivery of the fetus
 - + Stage III – Delivery of the placenta

Stage I

- ✘ Dilation of the cervix
 - + Caused by pressure of the fetus' feet and nose against the inside of the cervix

- ✘ Uterine contractions
 - + See one every 5-10 minutes

- ✘ Can last several hours

Stage II

- ✘ Frequent, forceful abdominal contractions
- ✘ Delivery of the fetus
- ✘ Duration depends on how many kids in the litter, how many kids the doe has had before, etc.
 - + Usually all kids delivered within 1-2 hours

Stage III

- ✘ Delivery of the placenta
- ✘ Usually within an hour after the last fetus
- ✘ If it has been longer than 8 hours then it is a retained placenta
 - + May need treatment with antibiotics

Dystocia

- ✘ Difficulty delivering the kid(s)
- ✘ Causes:
 - + Large singleton kid
 - + Malpresentation of kid
 - + Dead kid or kids
 - + Cervix not dilated
 - + Deformed kid
 - + Obstetrics - basics

When to assist

- + Stage I labor for more than an hour with no progress
 - ✘ Check for cervical dilation with a vaginal speculum or with your finger (be gentle!)

- ✘ If dilated, what body parts can you feel

- ✚ Stage II labor for more than 30 minutes with no progress

Obstetrics - basics

- ✘ Be clean!

- ✚ Wash vulva with mild soap and water

- ✚ Wear OB gloves – NO bare arms or hands!!!

- ✘ Be gentle!

- ✚ Do not force anything – uterus is VERY fragile

- ✘ LUBE!!!

- ✚ You can never have too much

- ✚ “General Lube” – NOT soap!

- ✘ Good restraint!

- ✚ Prevent injury to the doe and to yourself (i.e. broken arm)

Presentation of kid

- ✘ Normal

- ✚ Nose first with front legs extended (“anterior”)

- ✚ Hind legs extended (“posterior”)

- ✘ Make sure kid is delivered rapidly to prevent inhalation of fluid

- ✘ Normal?

- ✚ One leg back – an experienced doe can easily deliver this way

Solving the puzzle

- ✘ Front leg vs. hind leg?

- ✚ Front leg – bottom of hoof faces down

- ✚ Hind leg – bottom of hoof faces up

- ✚ UNLESS kid is upside-down (i.e. laying on its back)

- ✘ Front leg – both joints bend the same way
- ✘ Hind leg – Joints bend in different directions

Repositioning

- ✘ Repositioning a front leg
 - + Push kid back in to make room in the birth canal
 - + Cup hoof in hand while repositioning
 - ✘ Protect inside of uterus from cuts and punctures
 - + Move leg up and then pull forward and out
- ✘ Repositioning a hind leg
 - + Push kid back in to make room in birth canal
 - + Cup hoof in hand, move leg up and then pull back and out
 - + Important to have hock pushed as far forward as possible

Pulling a kid

- ✘ Once you have the kid in position, it is time to pull
- ✘ LUBE!!!
- ✘ Steady pressure with each contraction
- ✘ Pull straight back, once shoulders or pelvis is out pull down
- ✘ DO NOT pull unless doe is having a contraction
- ✘ Helpful to grab feet with a dry towel for better grip

Abnormal presentation

- ✘ Breech
 - + Posterior presentation with both hind legs facing forward (towards head)
 - + Push kid back in, pull hind legs up one at a time
- ✘ Neck flexed
 - + Can indicate that the kid is too big to fit through the birth canal

- + Push legs back in
- + Cup nose in hand to protect uterus from sharp teeth
- + Pull head around
- + Useful to have head snare

✘ Transverse

- + All four legs coming out at same time
- + OR all four legs facing doe's head – see kid's back
- + Try to push front legs and head back in, deliver hind end first
- + C-section often required

Twins or multiple kids

✘ Two (or more) kids coming out at the same time

- + Must push one back in to make room for the other
- + Often difficult to distinguish which limbs belong to which kid
- + Common cause is dead fetus entangling live kid(s)

When to call the vet

✘ 20 minute rule:

- + If you have been trying unsuccessfully to reposition a kid for 20 minutes, you need veterinary assistance

✘ C-section likely

✘ Cervix not dilated (i.e. "ring womb")

- + C-section required

✘ Deformed kid

- + C-section or fetotomy required

Aftercare

✘ Drink of warm water for the doe

- + And a cold beer for you!

- ✘ Check uterus for tears and/or additional fetuses
- ✘ Retained placenta common with dystocia
 - + If has not passed placenta within 8 hours, considered retained
 - + 1ml Oxytocin subcutaneously (prescription only)
 - + NEVER pull on the placenta – can tear uterus
 - + May need antibiotics if not passed after 12-24 hours
 - ✘ Oxytetracycline (LA-200) 5ml/100 pounds subcutaneously every 48 hours for 3 treatments

References

- ✘ Smith, Bradford P. Large Animal Internal Medicine. 4th edition
- ✘ Rowe, Joan D. "Principles of Obstetrics," VMD 446 Lecture #21
- ✘ Severidt, Julie, Heather Hirst, David Van Metre, and Frank Garry. "Calving and Calf Care on Dairy Farms," <http://www.cvmb.colostate.edu/ilm/proinfo/calving/notes/home.htm>