Dystocia and Sequelae in Beef Cows

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Calving Management

• Normal calving process

• Abnormal Calving

• Sequelae
Stages of Labor

Stage 1  Dilation of cervix
Stage 2  Birth of calf
Stage 3  Delivery of placenta
Stage I of Labor

- Calf rotates to upright position
- Uterine contractions begin
- Cervix dilates
- Water sac expelled

Often observed in heifers (4-6 hours)
May go unnoticed in cows (2-3 hours)

Cow is:
- Nervous
- Kicking at side
- Lying down
- Slight straining
Stage II of Labor

- Calf enters birth canal
- Feet & head protrude first
- Calf delivery complete

Cow has:
- Strong frequent straining - lying down
- Water sac and/or calf visible
- Discharge of fluids

Heifers (3-6 hours)
Cows (2-4 hours)
Normal Presentation
Stage III of Labor

- Caruncle attachments relax
- Uterine contractions expel membranes

Cow has:
- Mild straining
- Membranes hanging out
- Discharge of fluids

Heifers and cows (2-8 hours)
Abnormal if > 12 hours
End of Stage III

• If dystocia:
  • Palpate for tears / other calves
Calving Management

- Normal calving process
- Abnormal Calving
- Sequelae
Calving Difficulty Rates

- Estimated National Averages:
  - 15-17% Heifers
  - 3-5% Mature dams
    - 2004 Dargatz et al.
Recognizing Abnormal Delivery

- No progress in 30 minutes
- Head, but no feet
- Tail only
- Stage II: > 2 hours
Preparation for Examination of Cow/Calf

• Appropriate Animal Restraint
  • Animal safety
  • Human safety

• Clean External Area
Equipment

- OB Sleeves
- OB chains (straps)
- OB handles
- Clean bucket
- Liquid soap
- Lubricant
- Hot water
- Disinfectant
Initial Examination

• Vaginal:
  • Cervix: Dilated? (can you feel it?)
  • Water sac?
  • Calf position?
  • Calf Size?
Major causes of dystocia

• Abnormal fetal to dam size ratio

• Mal-presentation
3 Tests for Delivery

1. Simultaneous traction on front legs - entire head enters pelvis
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2. Traction on one leg - fetlock extends past vulva one hand’s width
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Failure at any point constitutes FAILURE!
Extraction with Force

- Use two-point traction
Extractive force

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- Apply force in a natural arc
Extractive force

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- Apply only as much force as one man
Extractive Force

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- Apply force in a natural arc
- Apply only as much force as one man
- **Use mechanical pullers carefully**
  - Do not use full pulling capacity
  - Do not “bow” or “bend” pullers
“Hip Lock”

After head and shoulders are delivered...rotate calf 90 to 180 degrees
Tip of the Day

- Use lubrication
  OB Lube
  J-Lube
  others
Calving Assistance

Two Feet and Legs Visible
Abnormal Presentations
Backwards
One Leg
Back
Two Legs
Back
Breech
Calving Assistance

If presentation is not successfully changed after 15 minutes...

Try something different
General Dystocia Guidelines

- Do not interfere too soon (or too late)
- Watch closely for onset of labor
- Look for continual progress
- Do not over-use force
- If unsure… call for help
Calving Management

- Normal calving process
- Abnormal Calving
- Sequelae
Calving paralysis

- Excessive pressure
- Time to evaluate
- Guarded prognosis after 24 hours
  - Prevent muscle damage (pressure sores)
  - Bedding, feed, water
Retained Placenta

- Diagnose at 72 hrs
- “Clean cow”
- Antibiotics?
- Problems:
  - Infection
  - Slow rebreeding
Prolapsed Uterus

- Emergency! Replace ASAP
- Inside uterus: bleeding / abdominal contents
- Prognosis:
  - Potential delayed rebreeding, but if pregnant not likely to recur
Prolapsed Uterus: Treat

- Caudal Epidural
- Clean
- Replace (flat hands, don’t puncture)
- Complete eversion
- Suture vagina (Buhner / other)
Vaginal Prolapse

- Trauma vs. other
- Prognosis:
  - Time out
  - Cause
Vaginal Prolapse: Treat

- Caudal epidural
- Clean
- Replace:
  - Eversion
  - Bladder
- Suture
Questions?

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