
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
- Cow is:
 - Nervous
 - Kicking at side
 - Lying down
 - Slight straining

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

Stage II of Labor

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

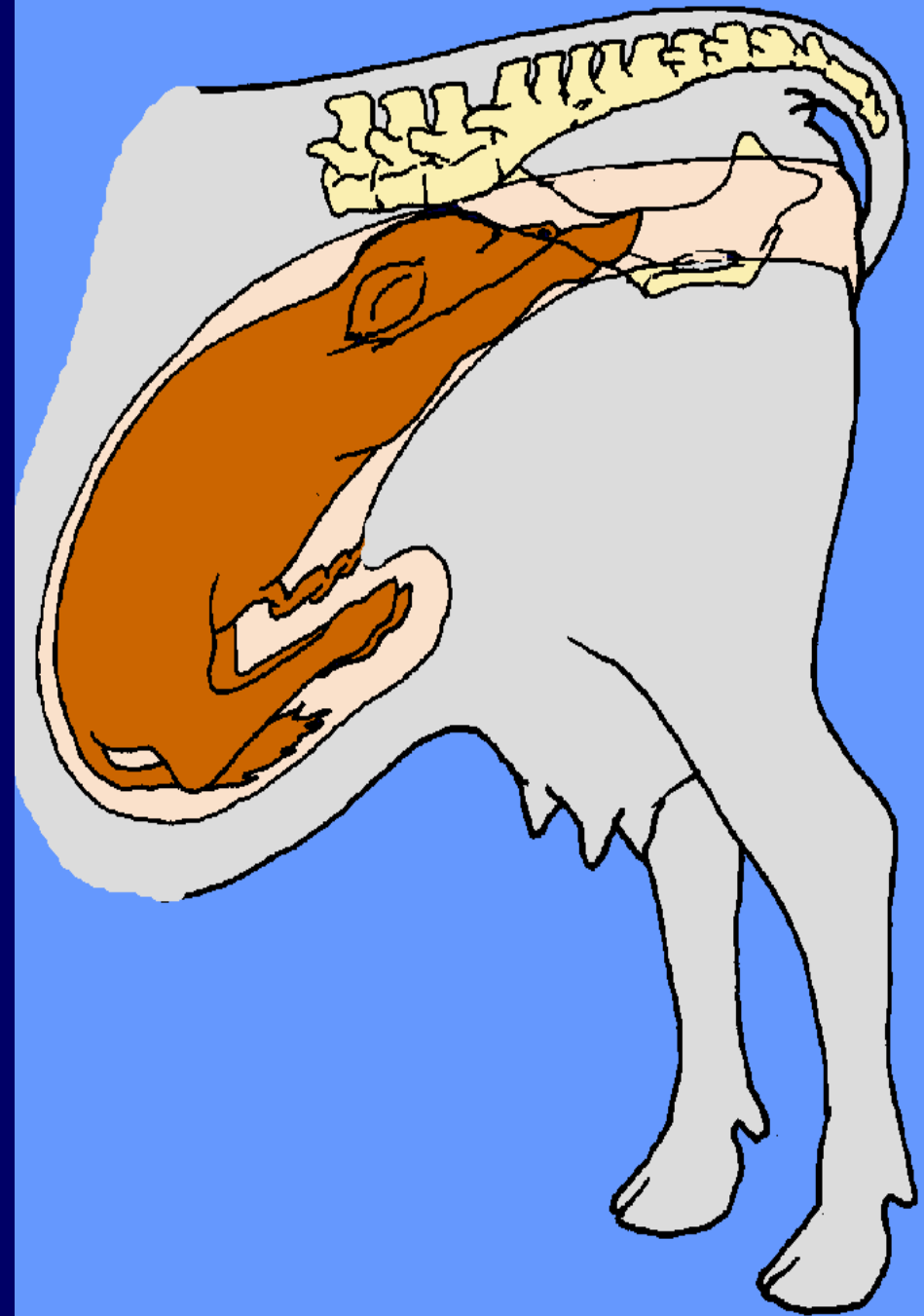
Cow has:

- 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



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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?

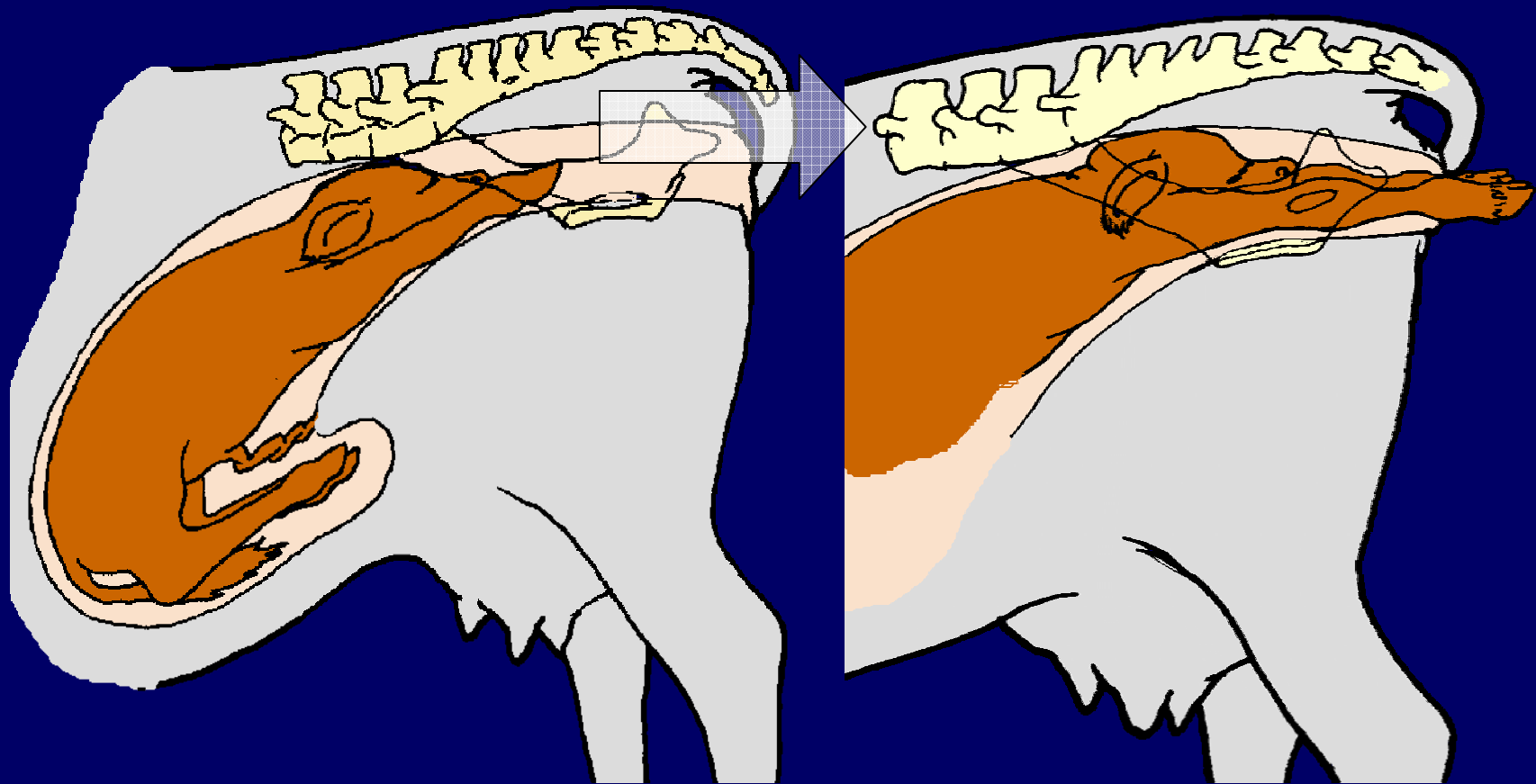
Major causes of dystocia

- Abnormal fetal to dam size ratio
- Mal-presentation



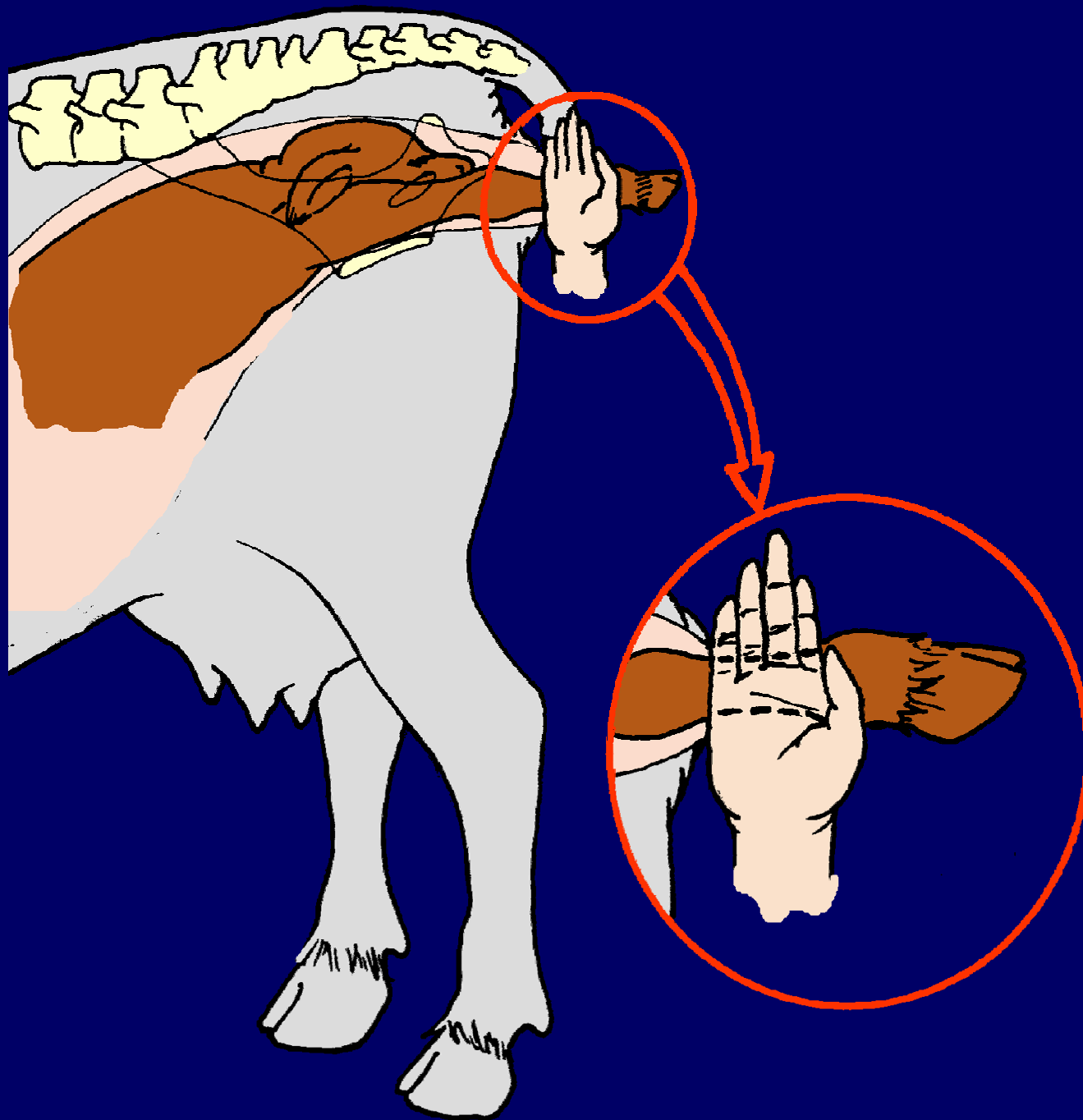
3 Tests for Delivery

1. Simultaneous traction on front legs - entire head enters pelvis



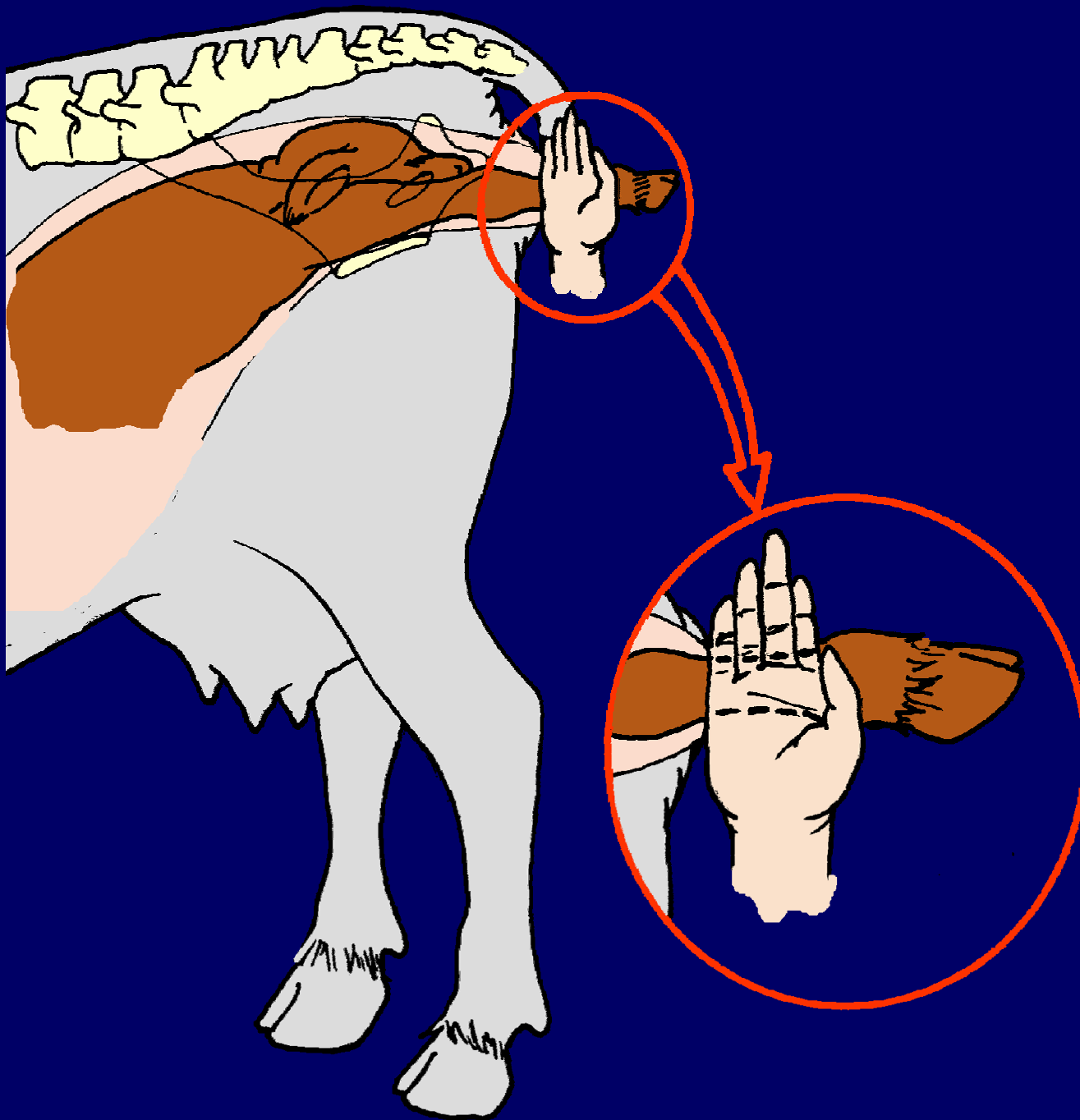
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2. Traction on one leg - fetlock extends past vulva one hand's width



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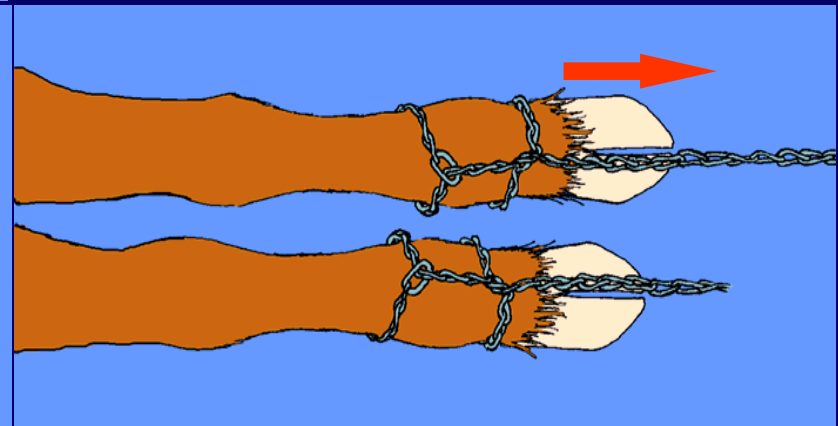
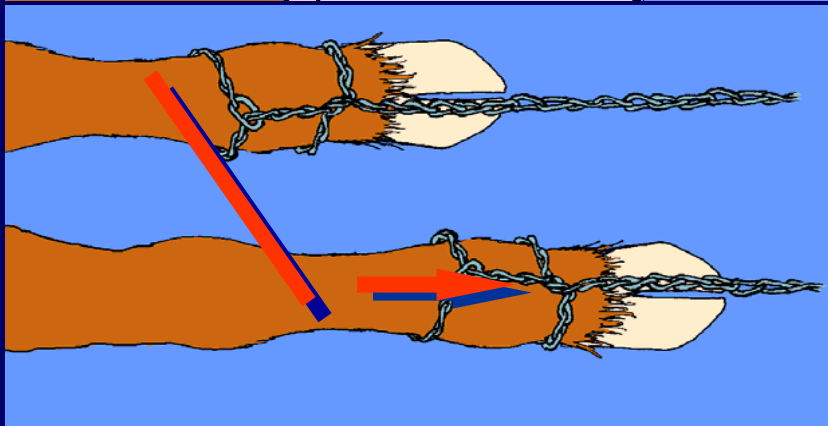
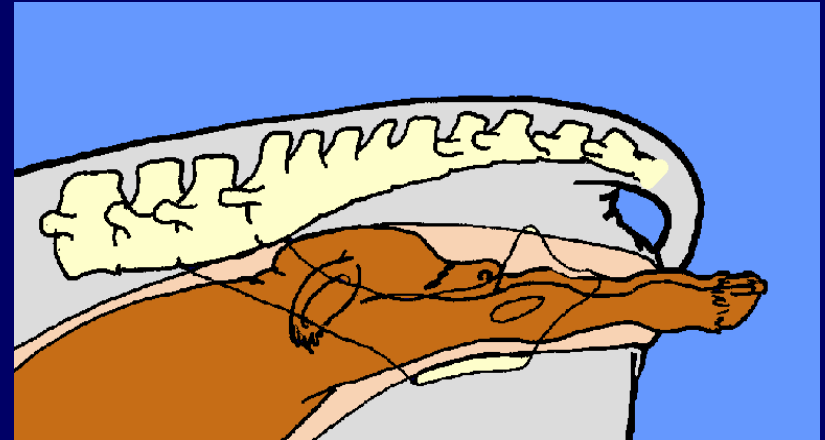
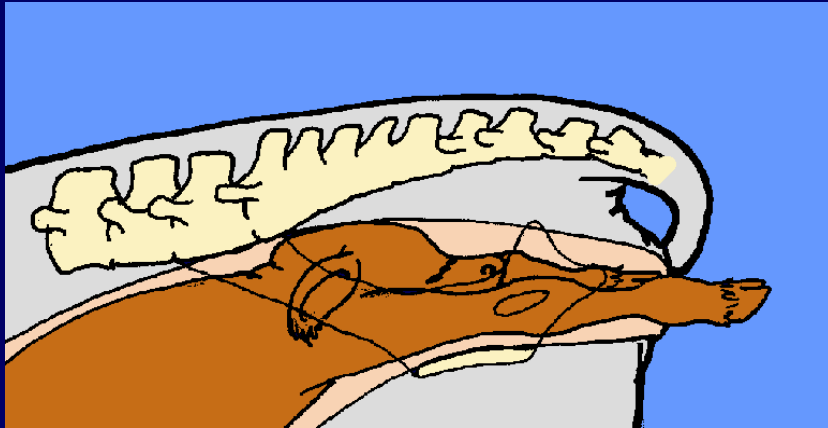
3 Tests for Delivery

1. Simultaneous traction on front legs - entire head enters pelvis
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Failure at any point constitutes FAILURE!

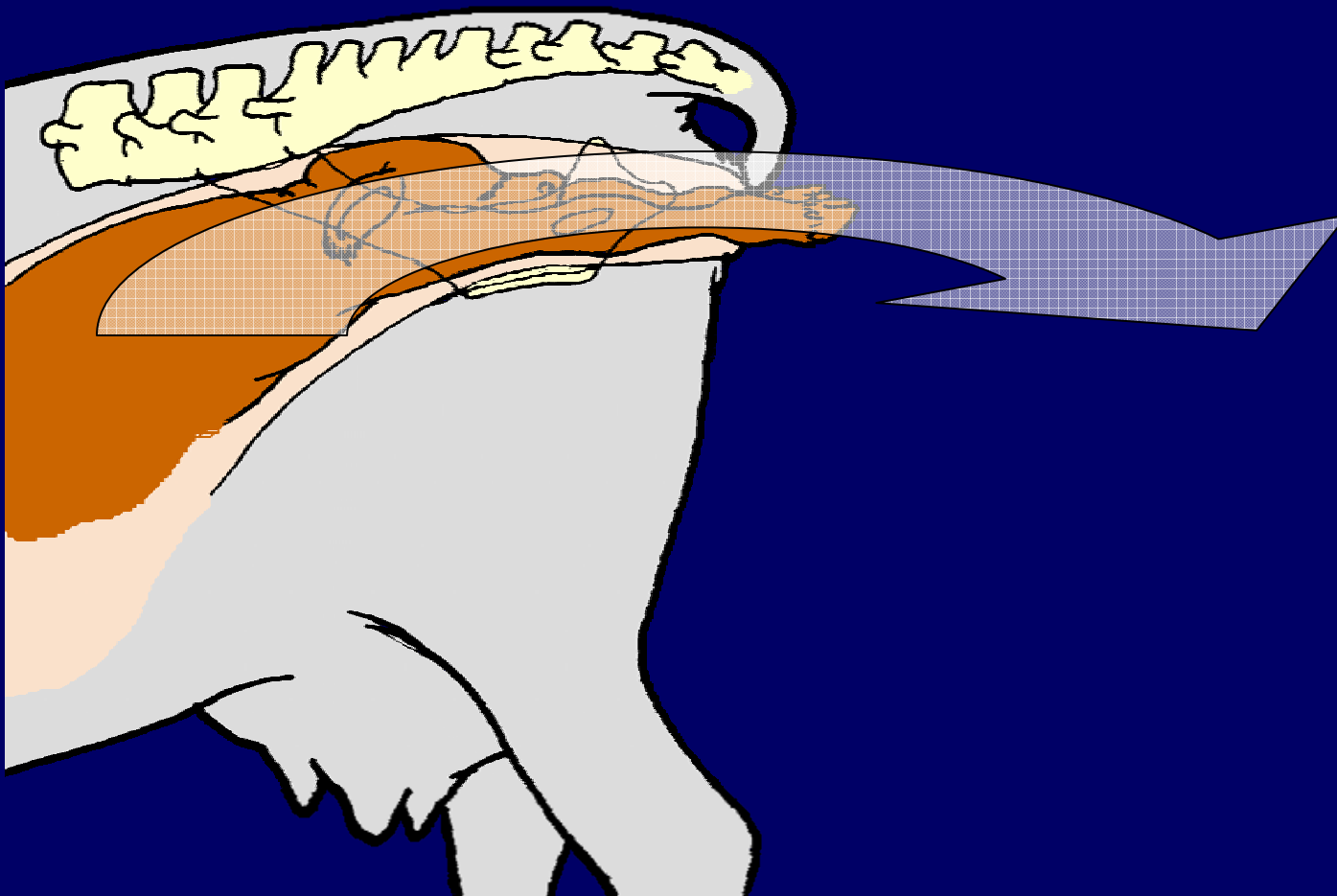
Extraction with Force

- Use two-point traction



Extractive force

- Use two-point traction
- Apply force in a natural arc



Extractive force

- Use two-point traction
- Apply force in a natural arc
- Apply only as much force as one man

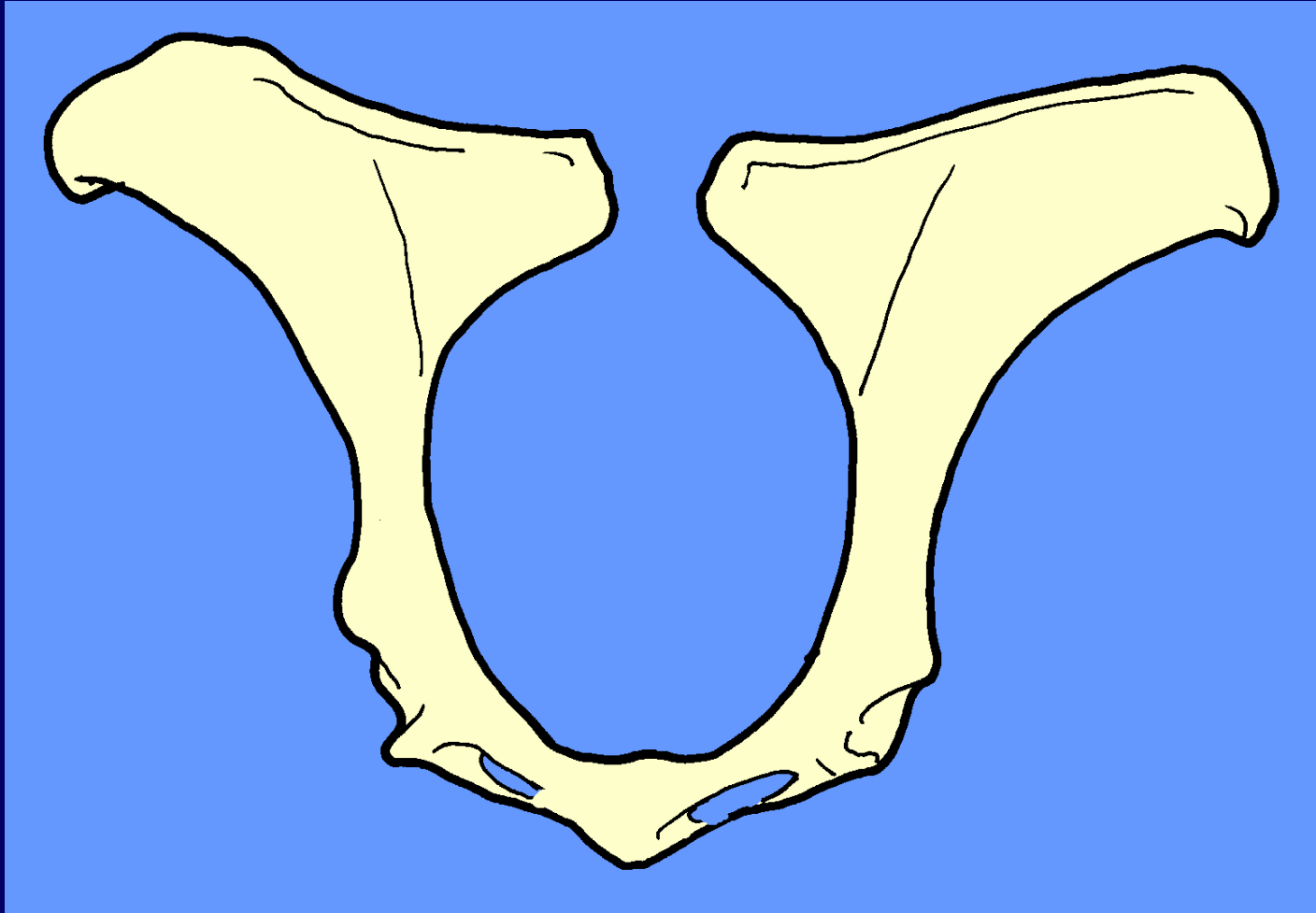


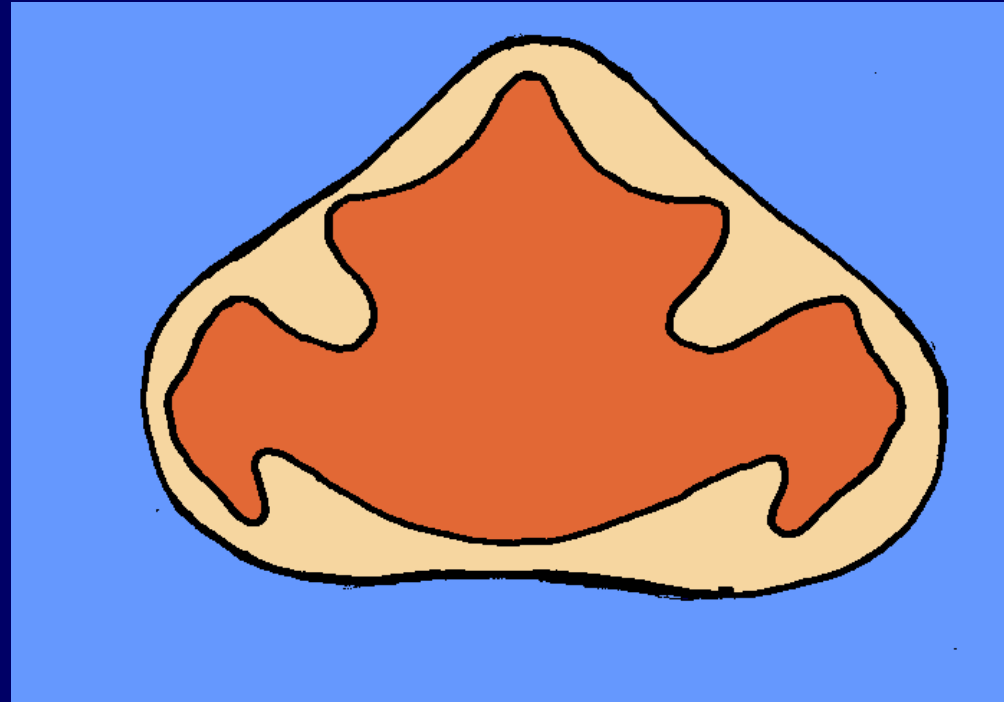
Extractive Force

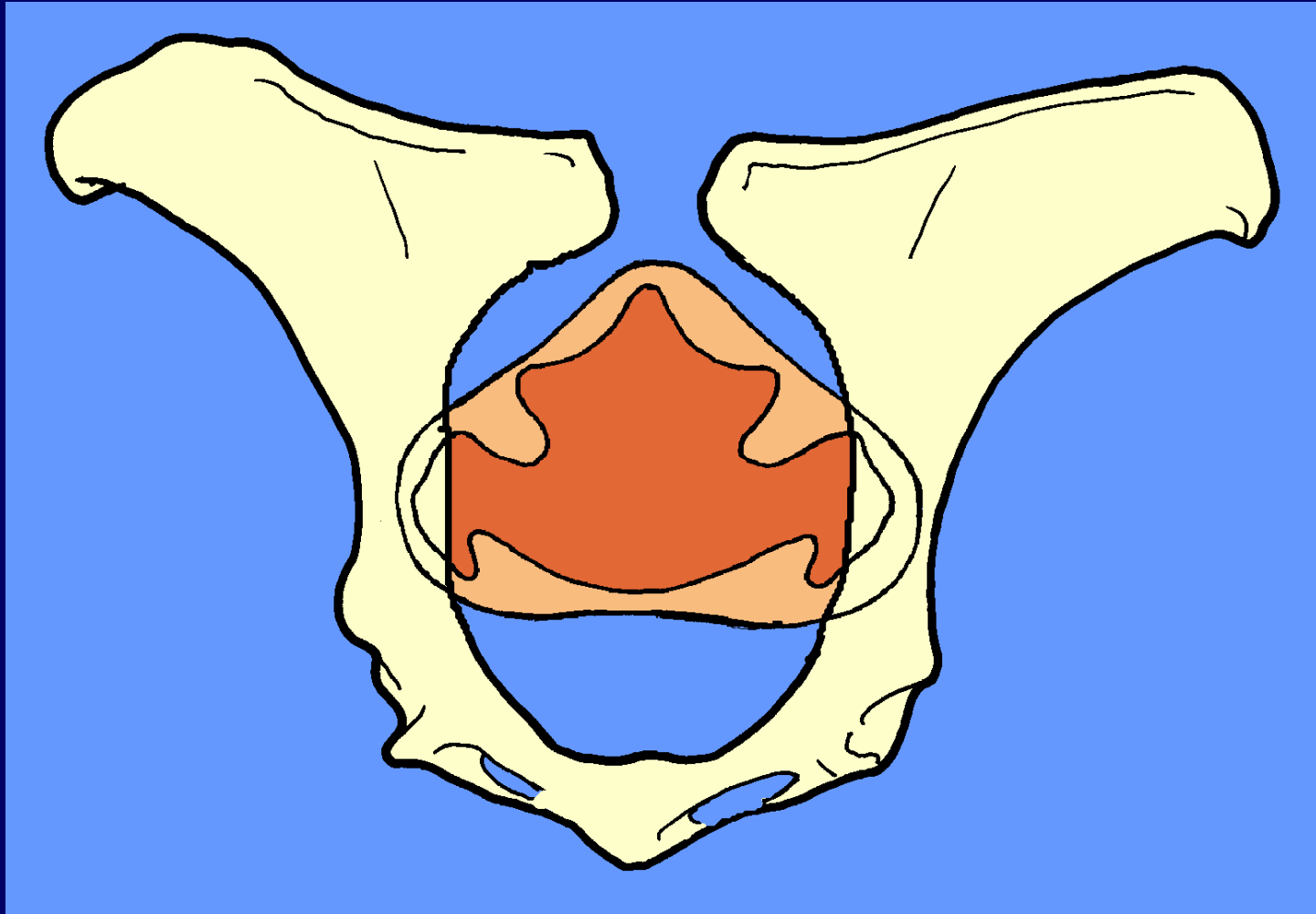
- Use two-point traction
- Apply force in a natural arc
- Apply only as much force as one man
- **Use mechanical pullers carefully**
 - Do not use full pulling capacity
 - Do not “bow” or “bend” pullers

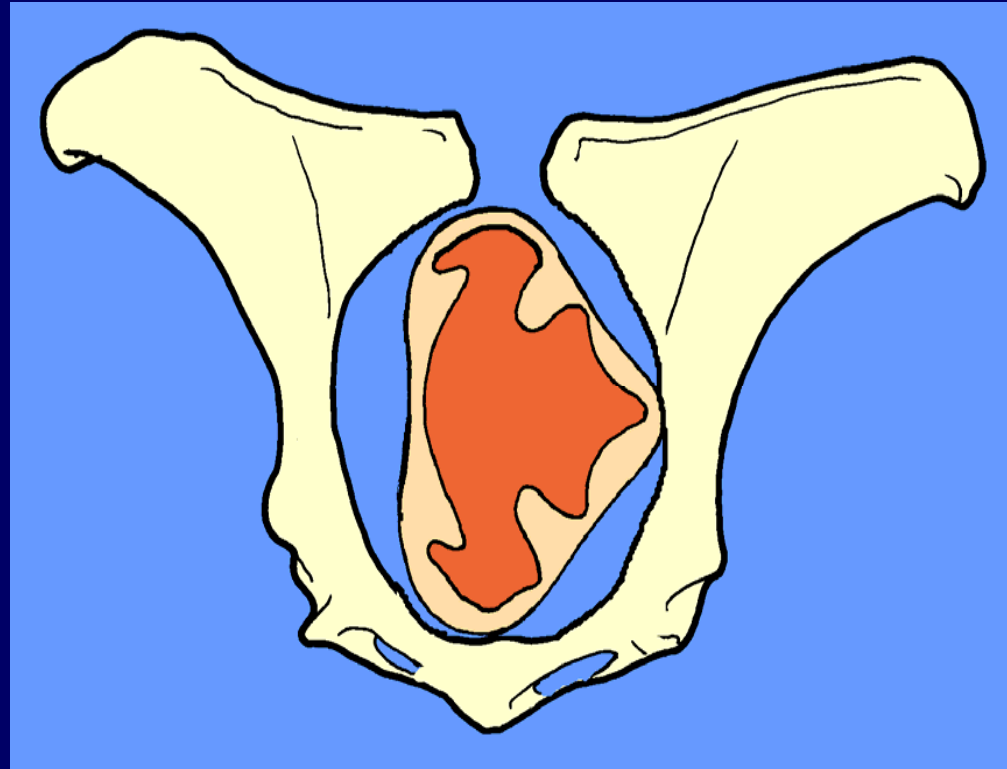
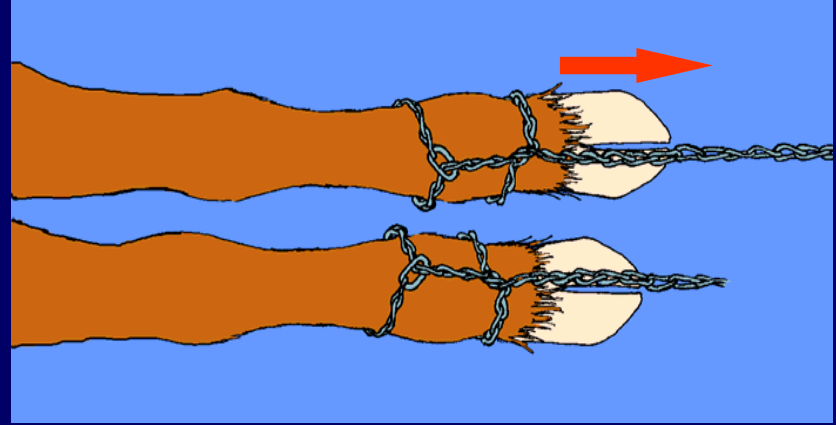
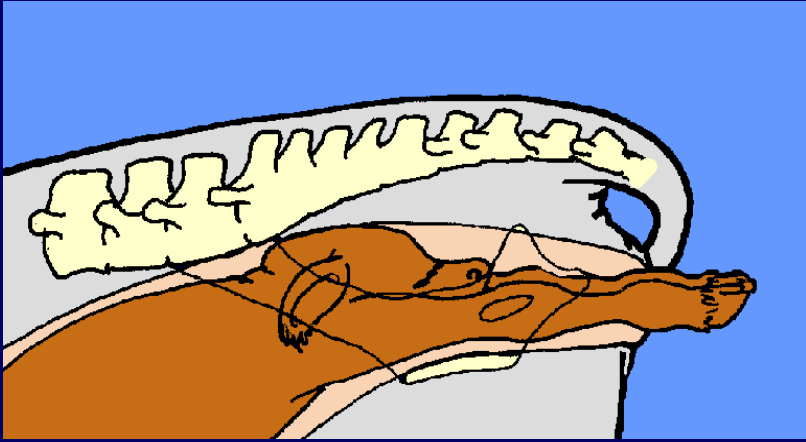
“Hip Lock”

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

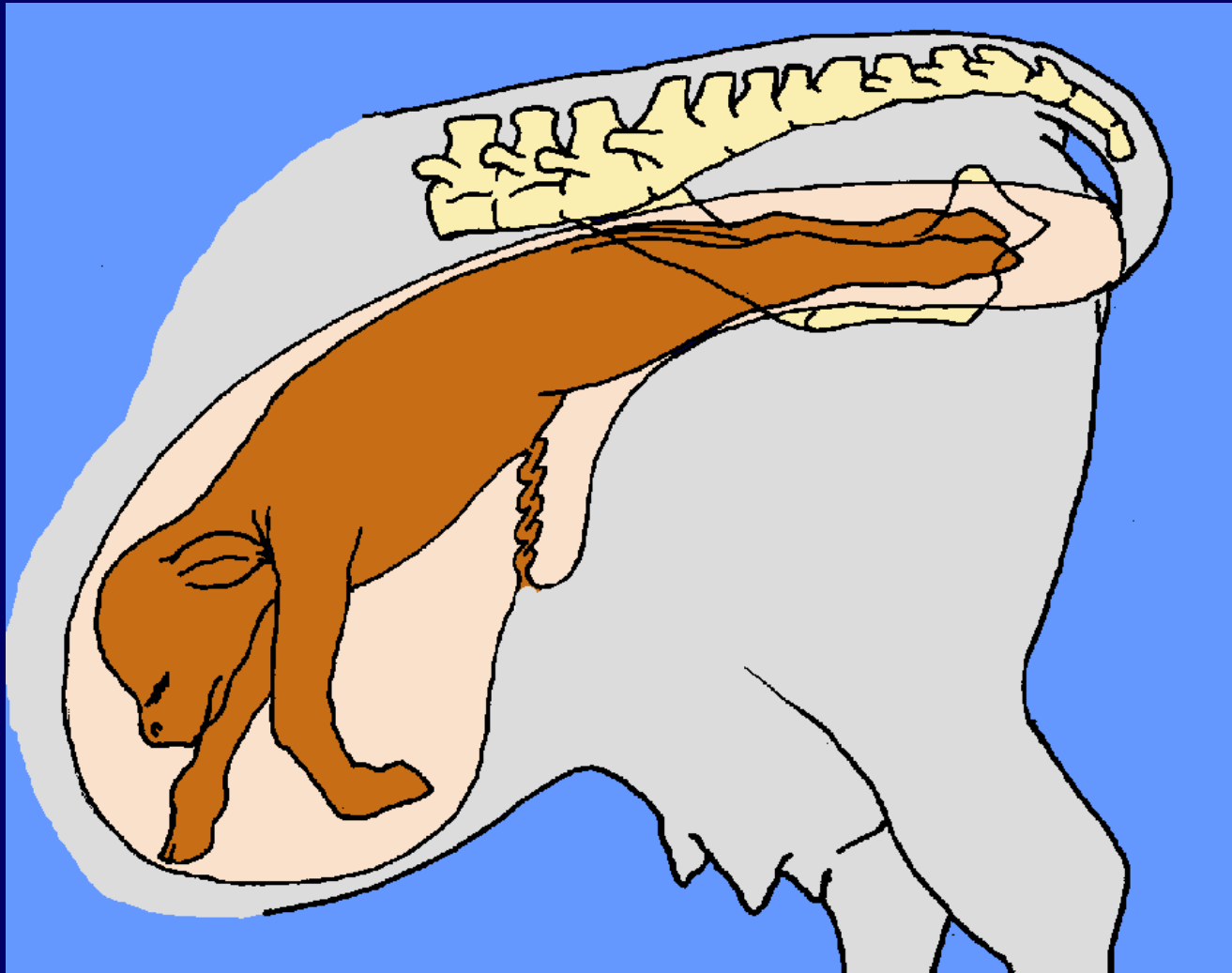
Two Feet and Legs Visible



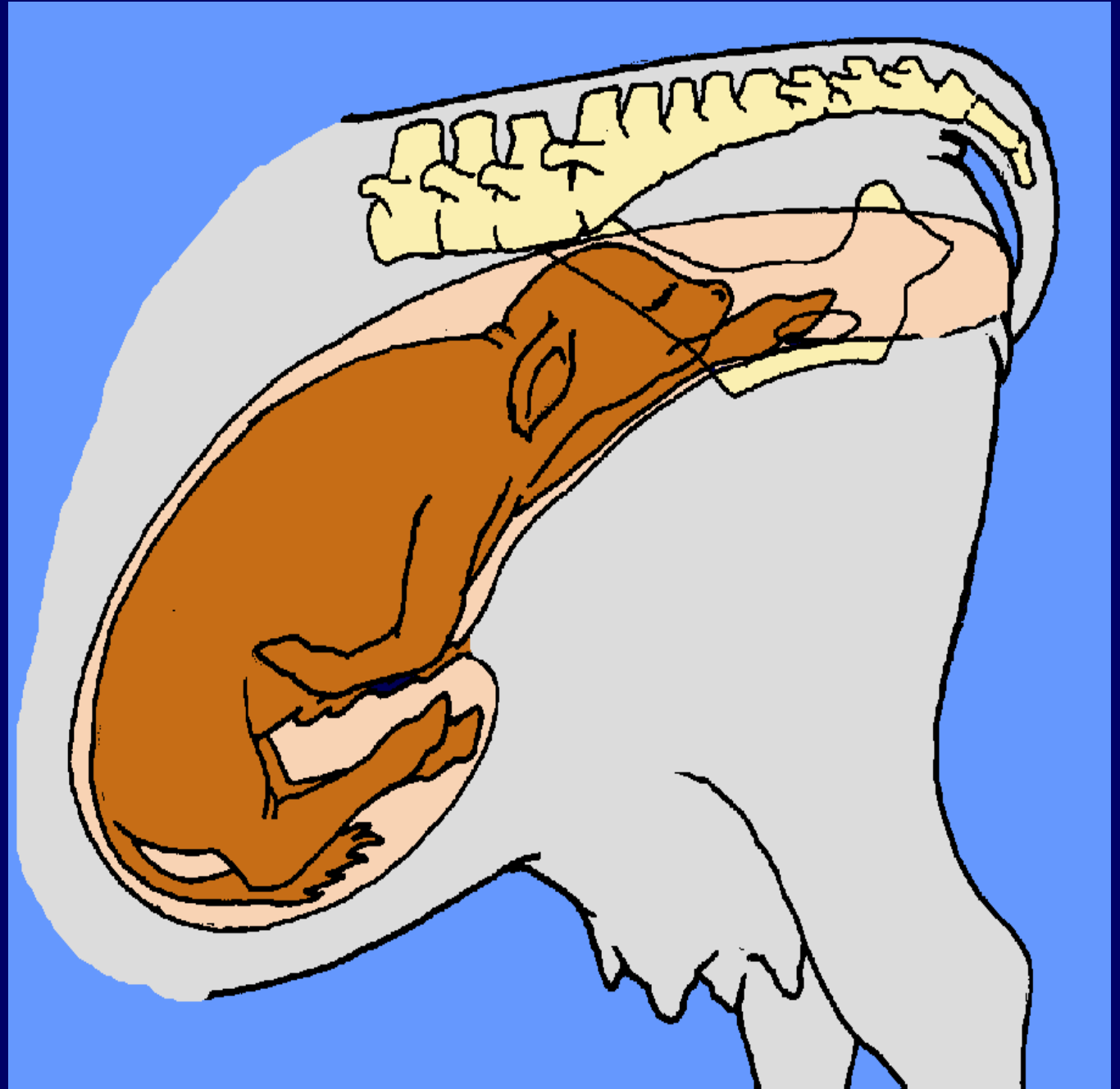


Abnormal Presentations

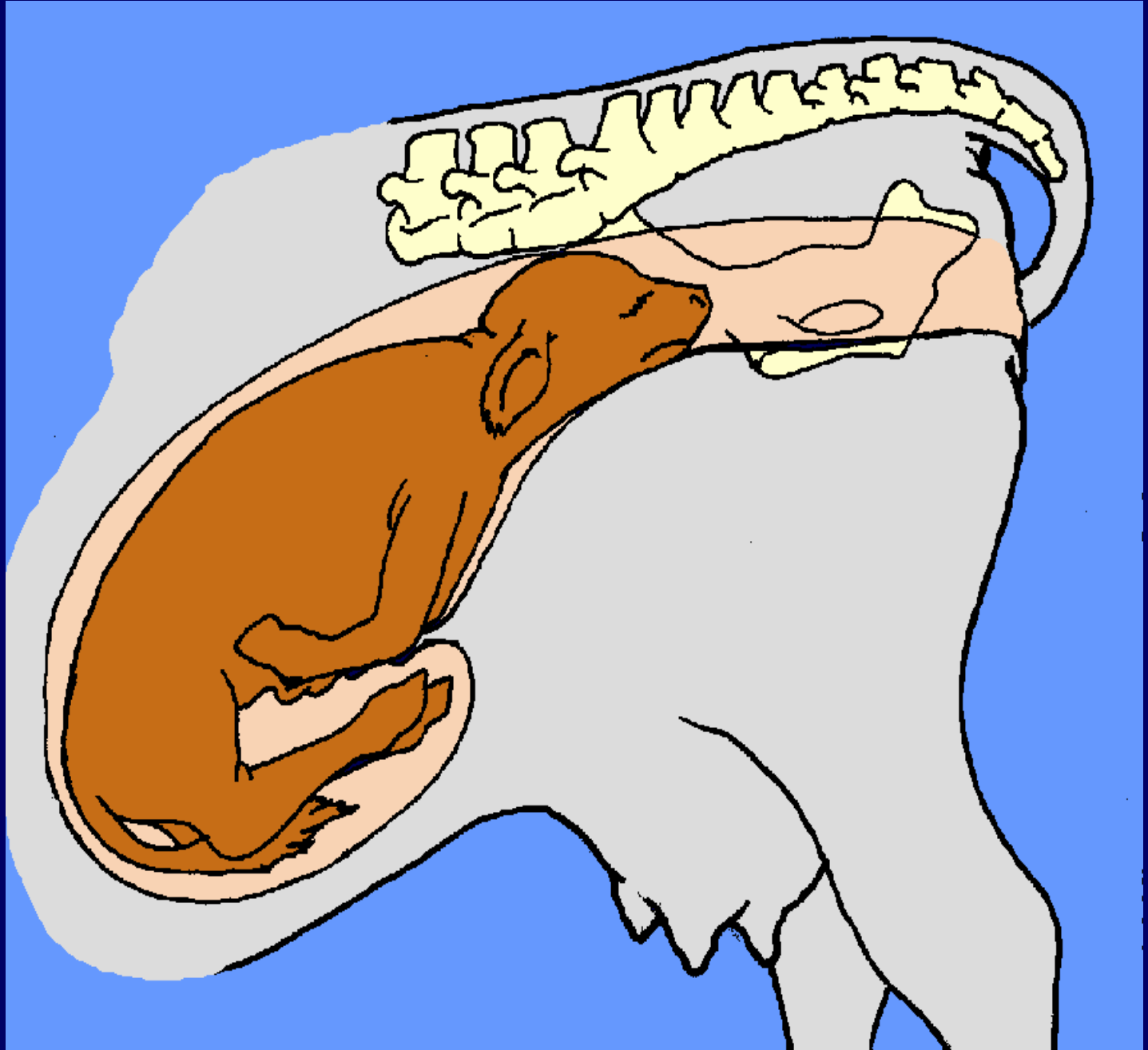
Backwards



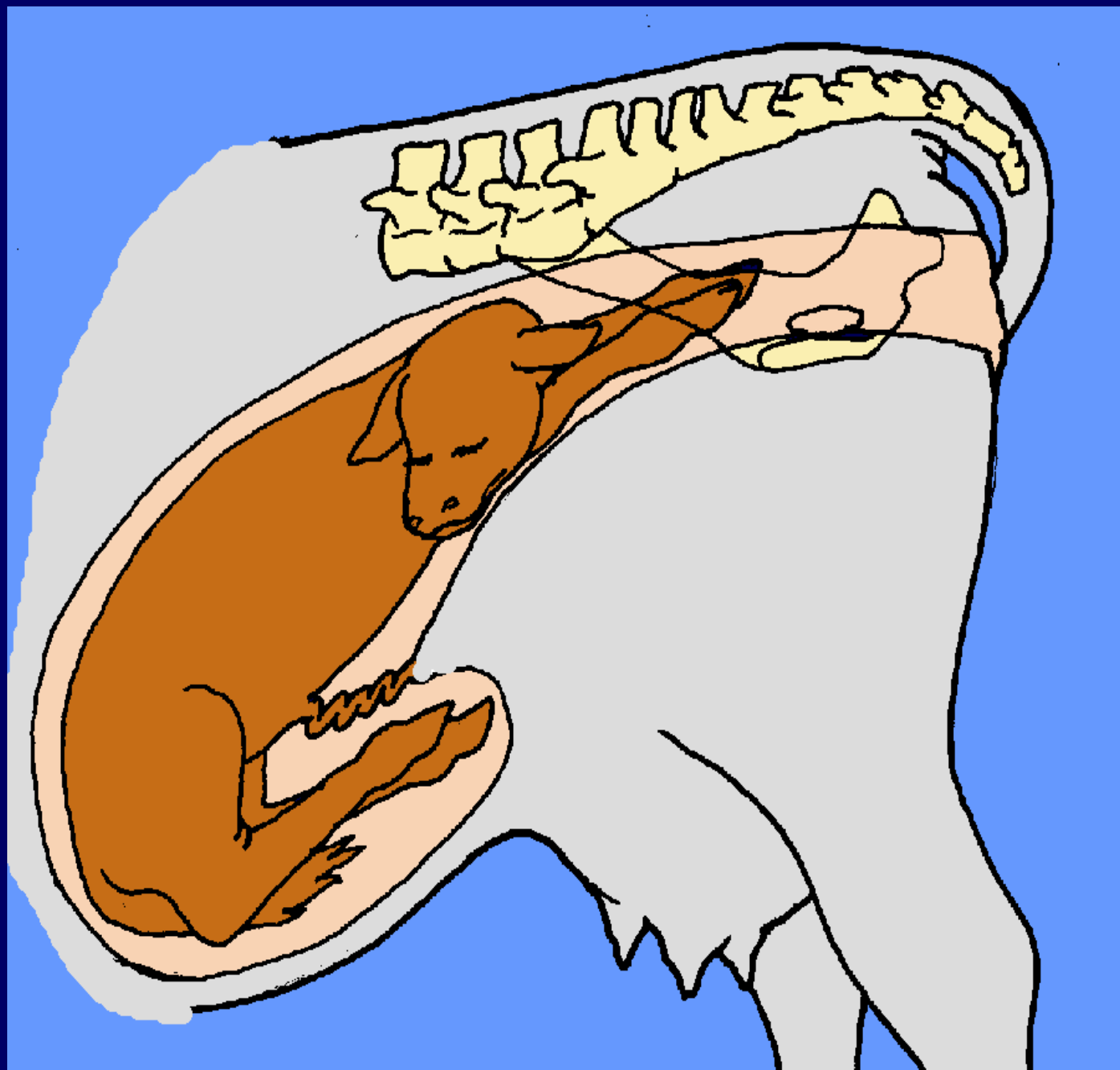
One Leg Back



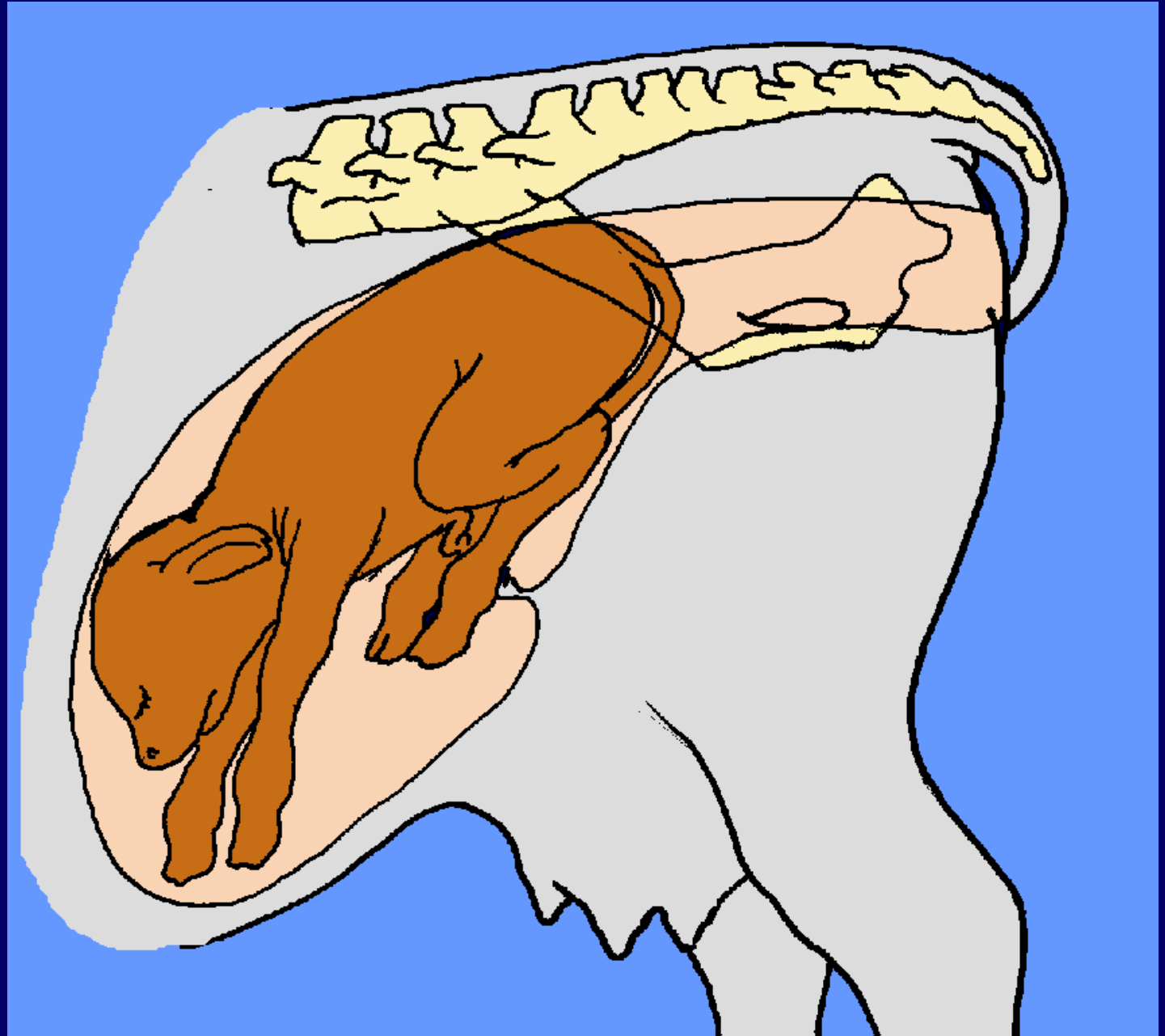
Two Legs
Back



Head 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



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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?

- Acknowledgements for some slides and pictures used with permission from:
 - Bob Larson and Richard Randle