



BASIC CAMELID HANDLING, MANAGEMENT AND MONITORING

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Outline

- ⦿ Basic information about camelids
- ⦿ Camelid behavior
- ⦿ Handling camelids
- ⦿ Feeding behavior and principles
- ⦿ Common problems
 - What can certain symptoms mean?
 - Is it an emergency?
 - When do you call the veterinarian?
 - What do you need to know when you call?
 - What do you do until the veterinarian examines the animal?
 - What do you watch for after treatment?
- ⦿ Administering medications

South American Camelids

- ◉ Llama
- ◉ Alpaca
 - Suri
 - Huacaya
- ◉ Guanaco
- ◉ Vicuña



South American Camelids

- Llama



South American Camelids

- Alpaca



Camelid Behavior

- ◎ Strong herd instinct
 - Always work with them in groups of at least 2
 - Keep dam and cria together
- ◎ Resent head handling
- ◎ Can kick
- ◎ Can spit

Camelid Behavior



Pre-spitting signal

Cush behavior



Camelid Behavior



Herding/Gathering



Haltering



Haltering – What not to do



Haltering – Proper fit



Haltering

- Spit rags



Ear Twitch



Ear Twitch



Dental Pad Massage



Tail Massage



Llama and Alpaca Chutes



Chute Restraint



Feeding Behavior and Principles

- ⦿ Most feeding programs include:
- ⦿ Hay or pasture (~75% of total feed)
- ⦿ Supplement (pelleted or extruded feed) or grain (no more than 25% of total feed)
 - Camelids should never have access to cattle, horse, swine or poultry feed
- ⦿ Trace mineral supplement
 - **Loose** or block

Hay Types



Hay Types



Supplemental Feed Types

Beet Pulp Shreds



Extruded Feed



Pelleted Feed



Grain Mixture



Feeding Behavior and Principles

- ① Feeding should be consistent in amount and time each day
 - Sudden changes to feeding program can cause significant gastrointestinal problems
- ① Monitor for equal feeding time
 - Make sure “bossy” lets the “little guy” have something to eat



Feeding Behavior and Principles

- ⦿ Always have:
- ⦿ Plenty of hay or pasture available
- ⦿ Plenty of fresh, clean water available
 - If electrolytes are available, plain water must also always be available
- ⦿ A group of animals should *NEVER* be without hay/pasture and water

Common Problems and Is It an Emergency?



Not Eating

- ◉ What it may mean
 - Any disease
 - Gastrointestinal upset
 - Infection, fever
 - Pain



Not Eating

- ⦿ Is it an emergency?

- Yes, if:
 - No feces seen for more than a few hours
 - Abdomen is distended
 - Depression, reluctance to get up or move
 - Difficulty breathing
 - High fever

Not Eating

⦿ When to call the veterinarian

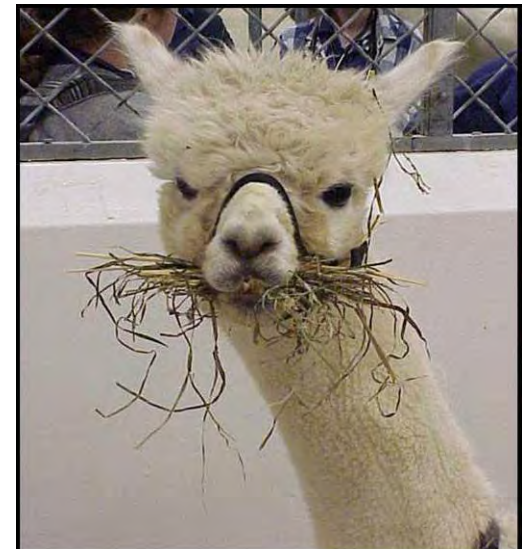
- Duration

- If eating less than normal, may allow to go 24 hours to see if there is improvement
- If not eating at all, veterinarian should be called and informed of condition



Not Eating

- ◉ What to know when you call
 - When last seen eating normally
 - Not eating at all
 - Eating less than normal
 - Prefer hay
 - Prefer grain or supplement
 - Been fine until now?
 - Weight loss



Not Eating

- ⦿ What to do until the vet evaluates
 - Do as veterinarian recommends
 - Offer water and highly palatable feed
 - Move to sheltered area
 - Take a buddy



Weight Loss

- ⦿ What it may mean

Not eating

Parasites

Chronic infectious disease

Liver disease

GI disease

Weight Loss

- ⦿ Is it an emergency?

No

When noticed, though, should be evaluated promptly

Weight Loss

- ◉ What to know when you call
 - How much weight lost
 - Appetite change and for how long
 - Others animals affected



Weight Loss

- ⦿ What to do until the vet evaluates
 - Offer highly palatable feed
 - Feed separately from herd
 - Note intake



Colic

- ⦿ What it may mean
 - Stomach ulcer, hairball
 - GI upset, distension, twist
 - Uterine torsion



Colic

- ⦿ Is it an emergency?
 - Yes
 - Very tolerant of pain



Colic

⦿ What to know when you call

- Behavior
- Appetite
- Change in feed
- Urinating or defecating
- Abdominal distension
- Due date, if pregnant

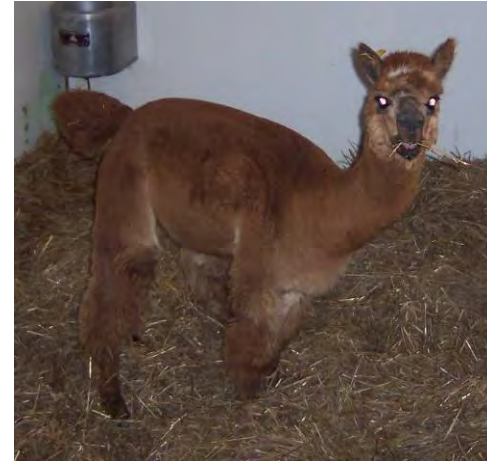


Colic

- ⦿ What to do until the vet evaluates
 - Do not excite
 - Walk slowly or load quietly
 - Watch for fecal and urine passage, be prepared to describe or catch some

Straining

- ◉ What it may mean
 - Urination – urinary blockage
 - Defecation – constipation
 - Intestinal obstruction
 - Difficulty delivering cria
 - Coccidia, whipworms



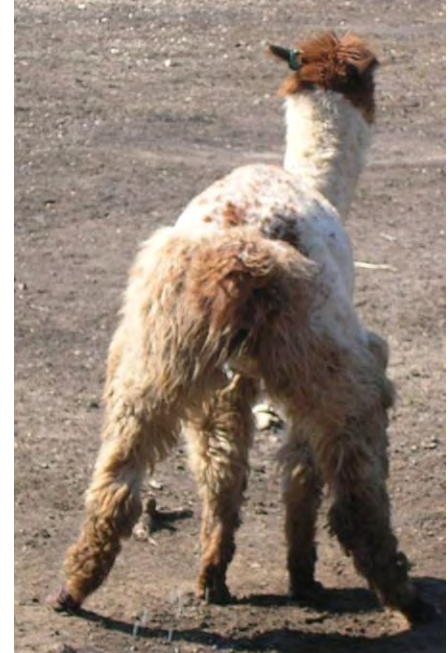
Dung Piles

- ◉ Animals will posture over these community latrines to urinate and defecate
 - Should not linger or come back frequently



Straining

- ⦿ Is it an emergency?
 - Yes, with the exception of parasites
 - If abdominal distension
 - If not producing feces or urine
 - If due to give birth



Straining

- ⦿ When to call the vet
 - If straining accompanies other abnormal behaviors
 - Reduced appetite, kicking at belly, rolling, standing off alone
 - If urination or defecation is not observed within an hour of straining episode

Straining

- ◉ What to know when you call
 - Stage of gestation
 - Distended abdomen
 - When last seen to urinate and defecate
 - When last seen eating normally



Straining

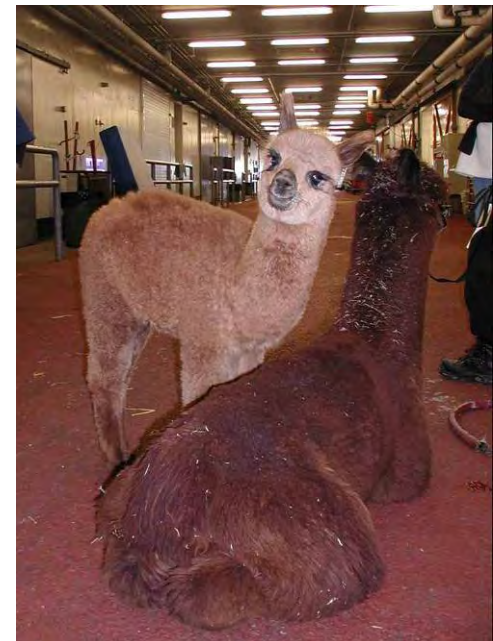


- ◉ What to do until the vet evaluates
 - Vet may have you do a digital exam or give an enema
 - Wrap tail and clean back end

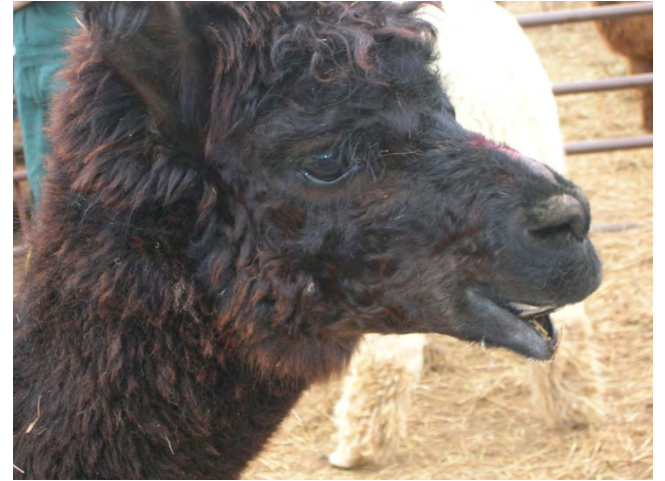


Down/ Weak/ Wobbly

- ◉ What it may mean
 - Neurologic disease
 - Musculoskeletal disease
 - Metabolic disease



Heat Stress



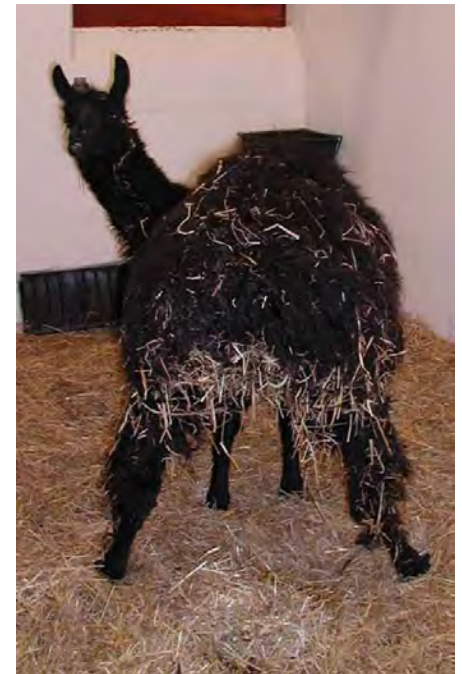
- Heat Stress Index =
Humidity (%) + Temperature (°F)
- HSI = < 120 handling is considered safe
- HSI = 120-150 unnecessary handling should be avoided
- HSI = > 160 handling is considered dangerous and animals should be closely monitored

Down/ Weak/ Wobbly

- ⦿ Is it an emergency?
 - Yes
 - Usually indicates severe disease
 - Medications more effective during the acute phase of disease

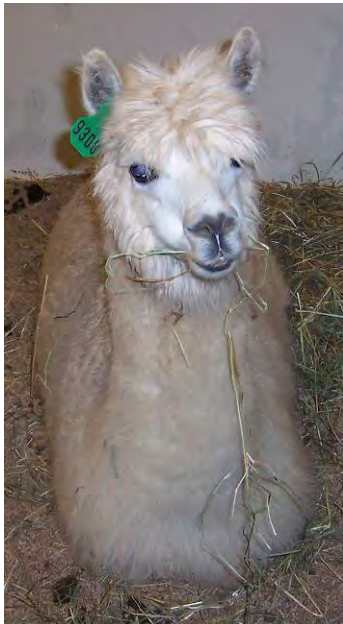
Down/ Weak/ Wobbly

- ◉ What to know when you call
 - How long down
 - Anything abnormal noticed prior to going down – weakness, appetite, lameness



Down/ Weak/ Wobbly

- ◉ What to do until the vet evaluates
 - Keep cool (or warm)
 - If laying on side, roll up on chest and prop there – do not allow to remain on side
 - When moving to load, handle head and neck very gently
 - Place food and water within reach
 - Provide good footing



Down/ Weak/ Wobbly

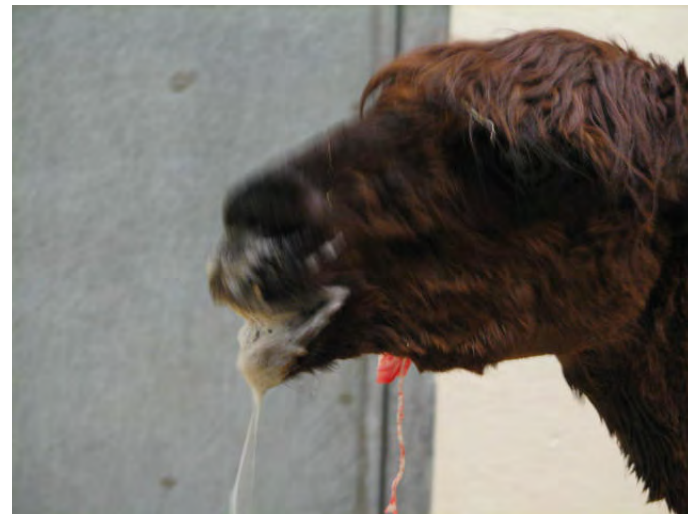
- ⦿ After evaluation by veterinarian
 - If has not showing improvement or worsens during treatment in 24 hours, need to do further testing



Choking

- ⦿ What it may mean

- Animal has feed material packed into esophagus
- There may be a mass, abscess, tumor or injury impeding swallowing



Choking

- ⦿ Is it an emergency?
 - Yes
 - Animals may be unable to breathe
 - Bloating can occur, leading to death

Choking

- ⦿ What to know when you call the veterinarian
 - Age of animal
 - Type of feed
 - Any previous problems noted
- ⦿ What to do until vet evaluates
 - Move animal quietly to safe area with buddy
 - If animal is hot, cool with water

Choking

⦿ Prevention

- Animals which consume feed quickly are at highest risk
- Soaking risky feeds for at-risk animals
 - Beet pulp
 - Small grains



Normal Birthing Events

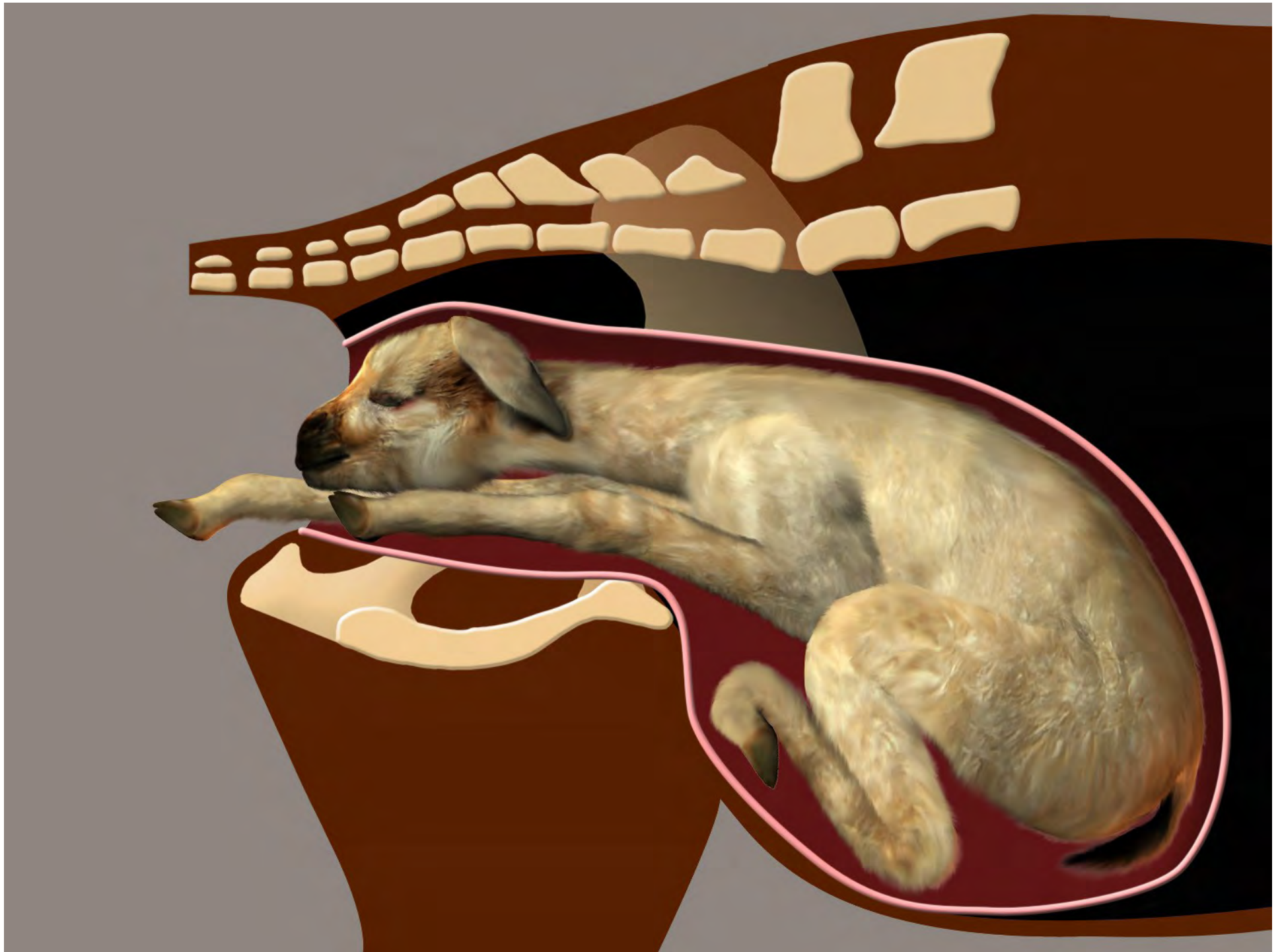
- Stage 1- starts with initial uterine contractions and ends with rupture of chorioallantois; lasts 2-6h.
- Stage 2- Fetal expulsion, active abdominal press; lasts 10-30 min.
- Stage 3- Expulsion of fetal membranes – 2-6 hr.
- Time to intervene is when no progress is made 30 minutes after the onset of Stage 2 labor or there is failure to enter Stage 2.

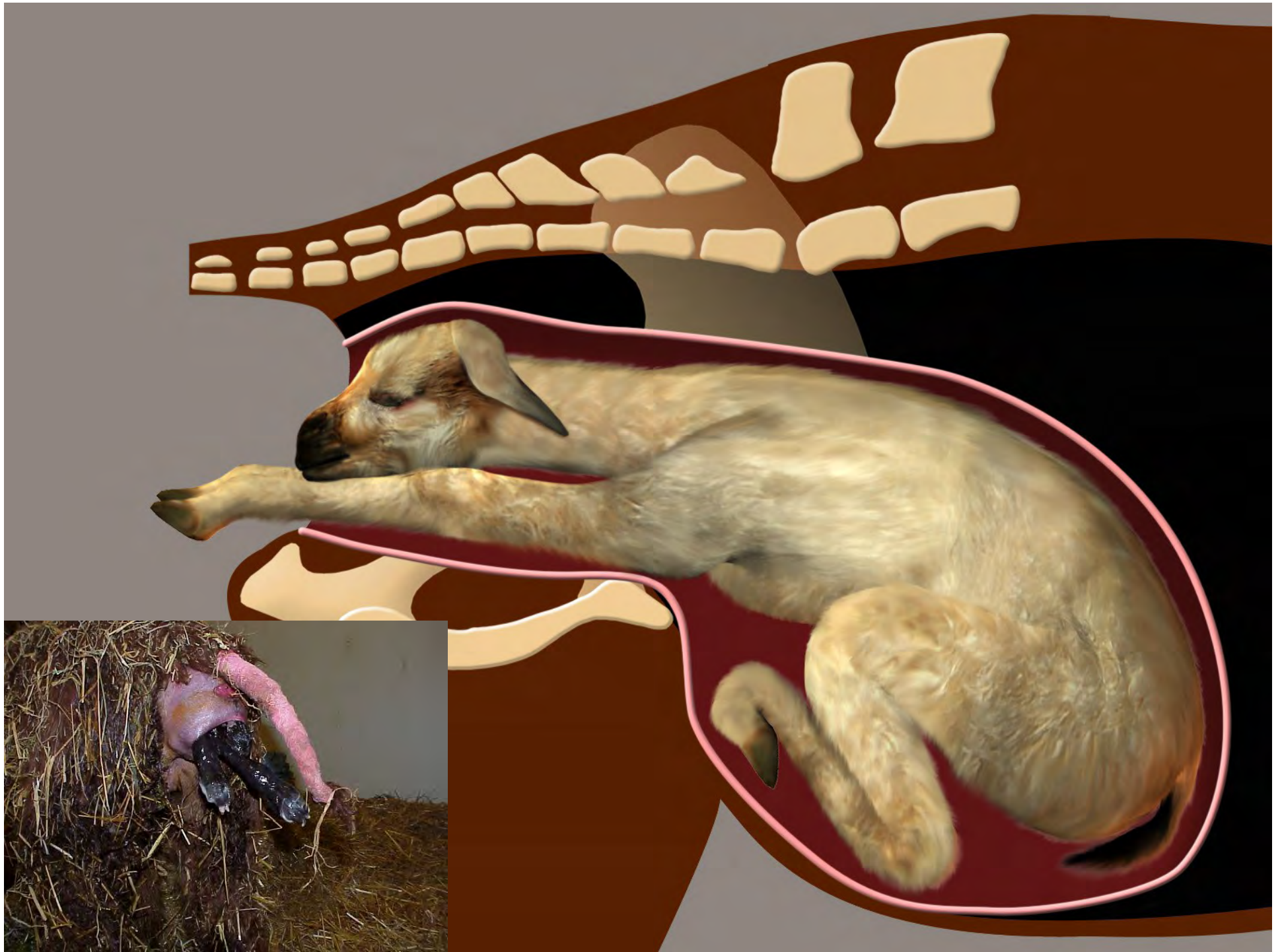
Difficult Birth

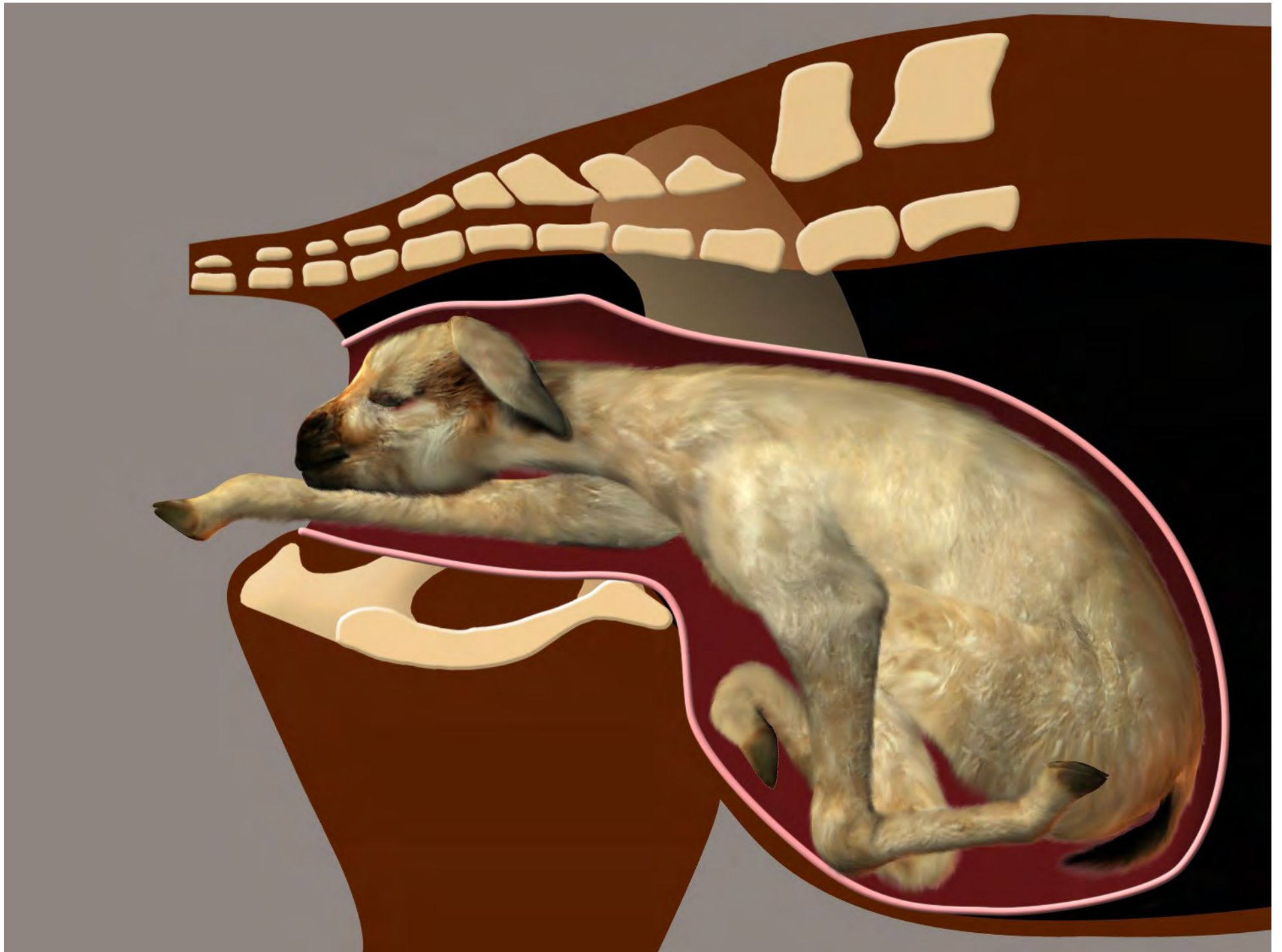
- ⦿ What it may mean
 - Fetal malposition
 - Uterine torsion
 - Fetal oversize/Maternal undersize

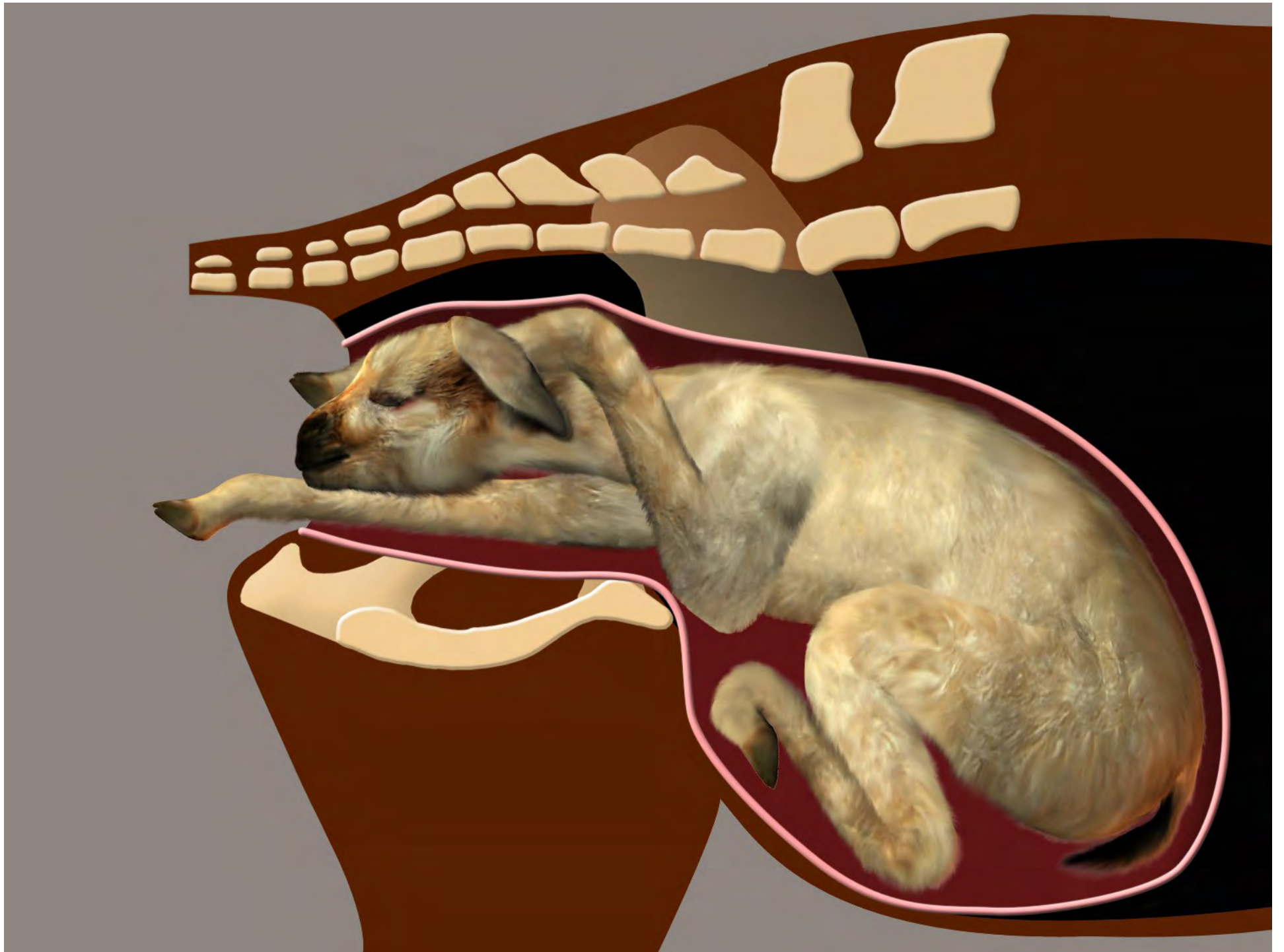
Difficult Birth

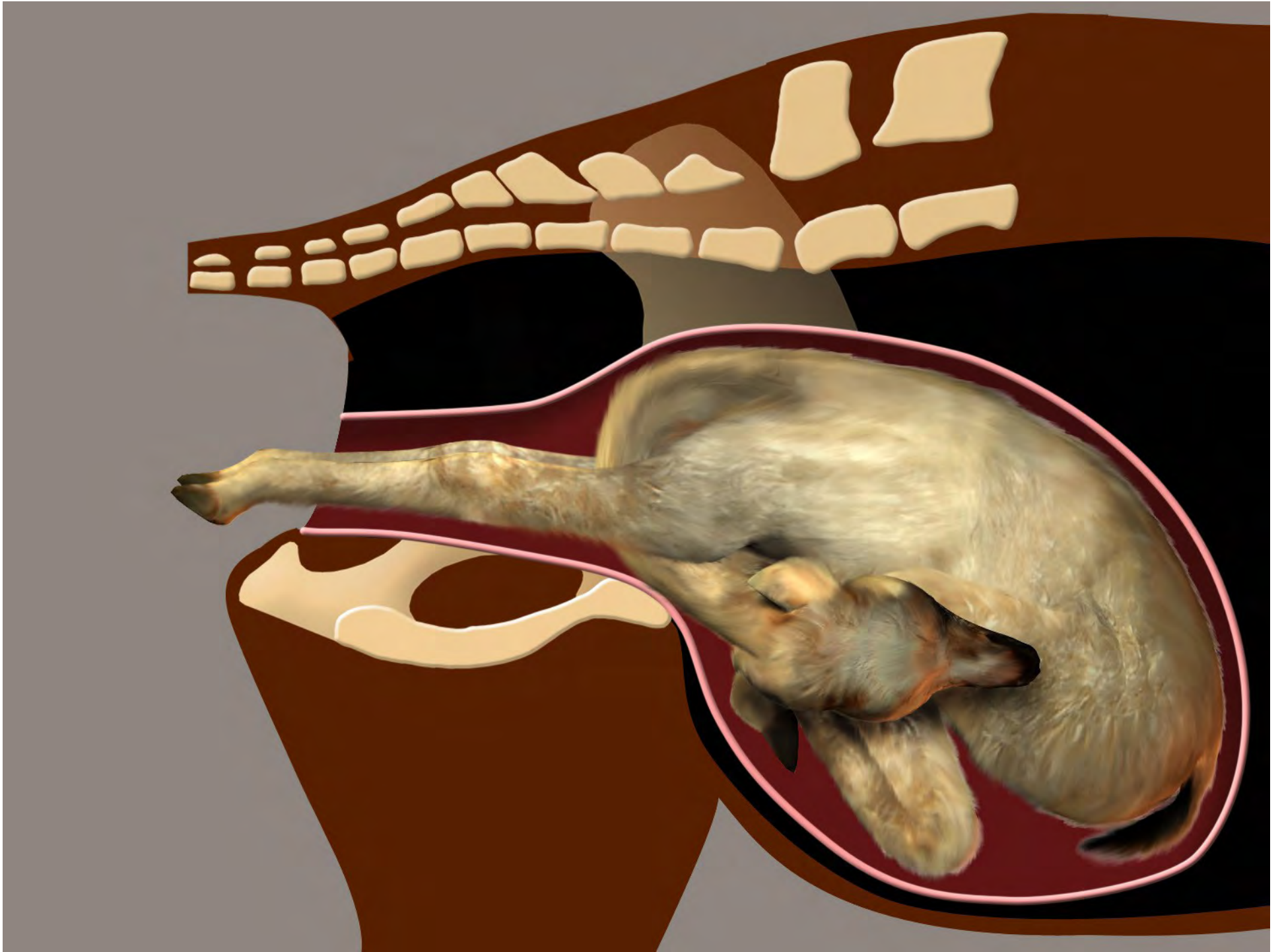
- ⦿ Is it an emergency?
 - Yes
 - If no progress made after pushing for 20 minutes

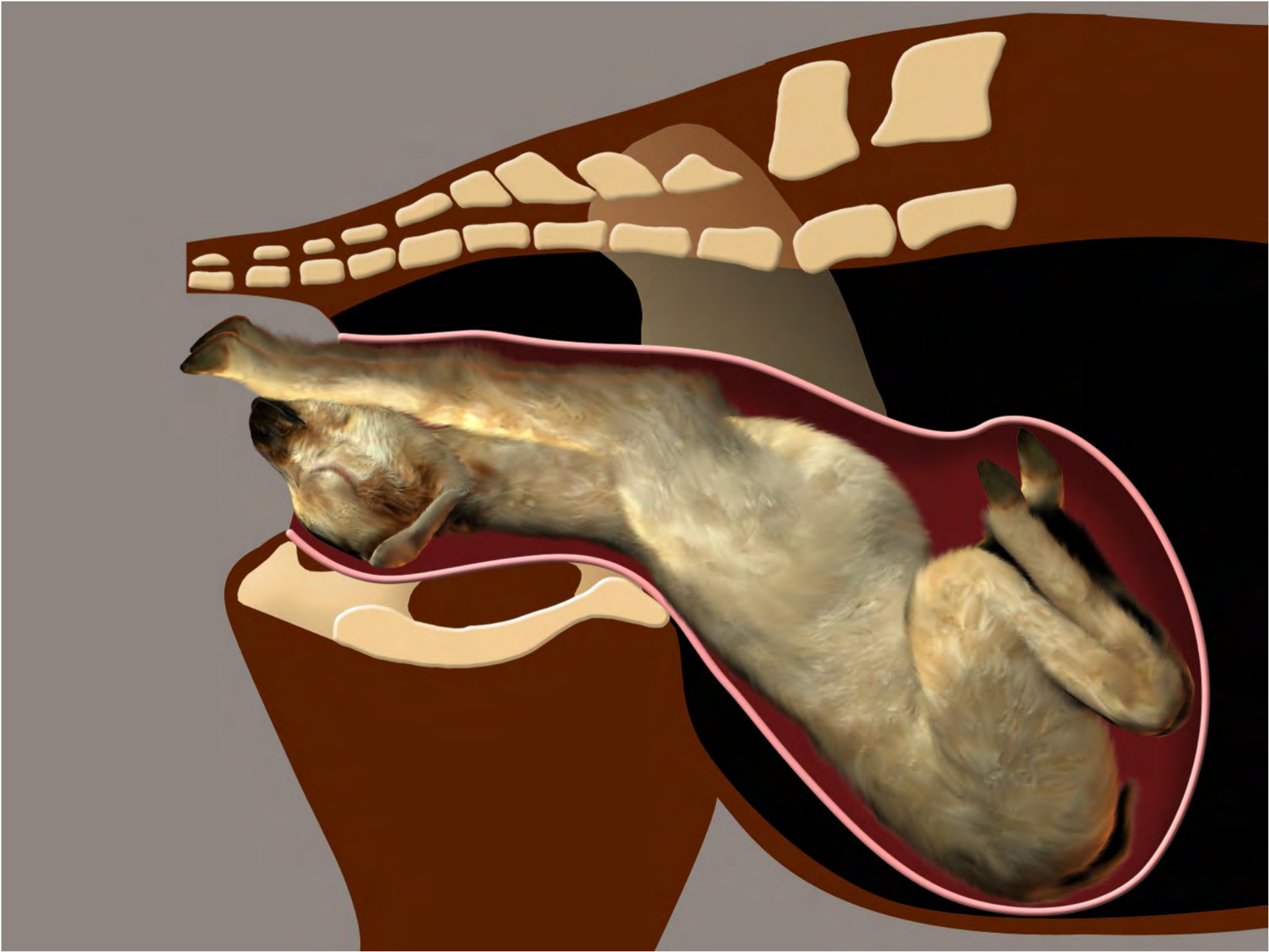


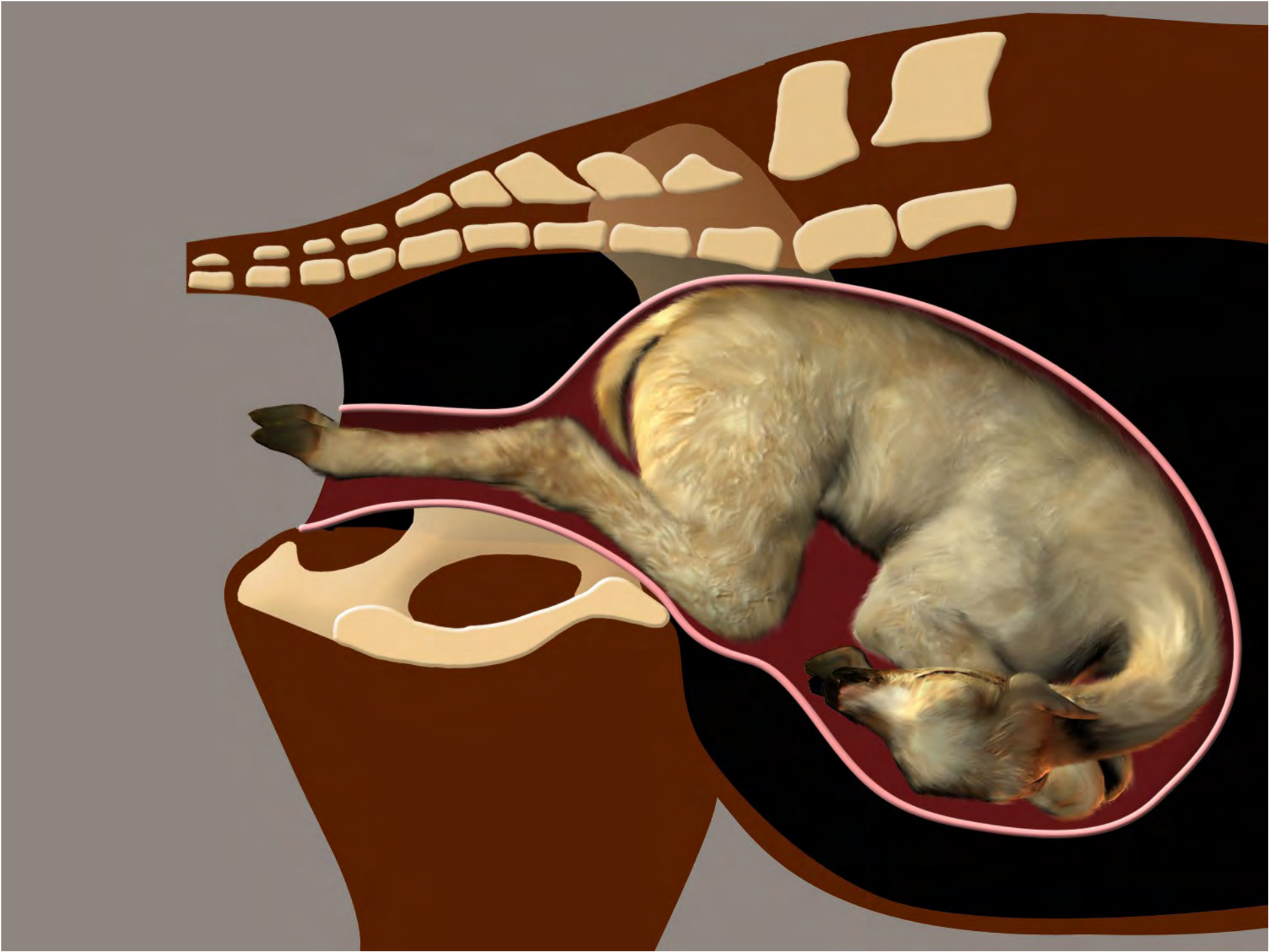


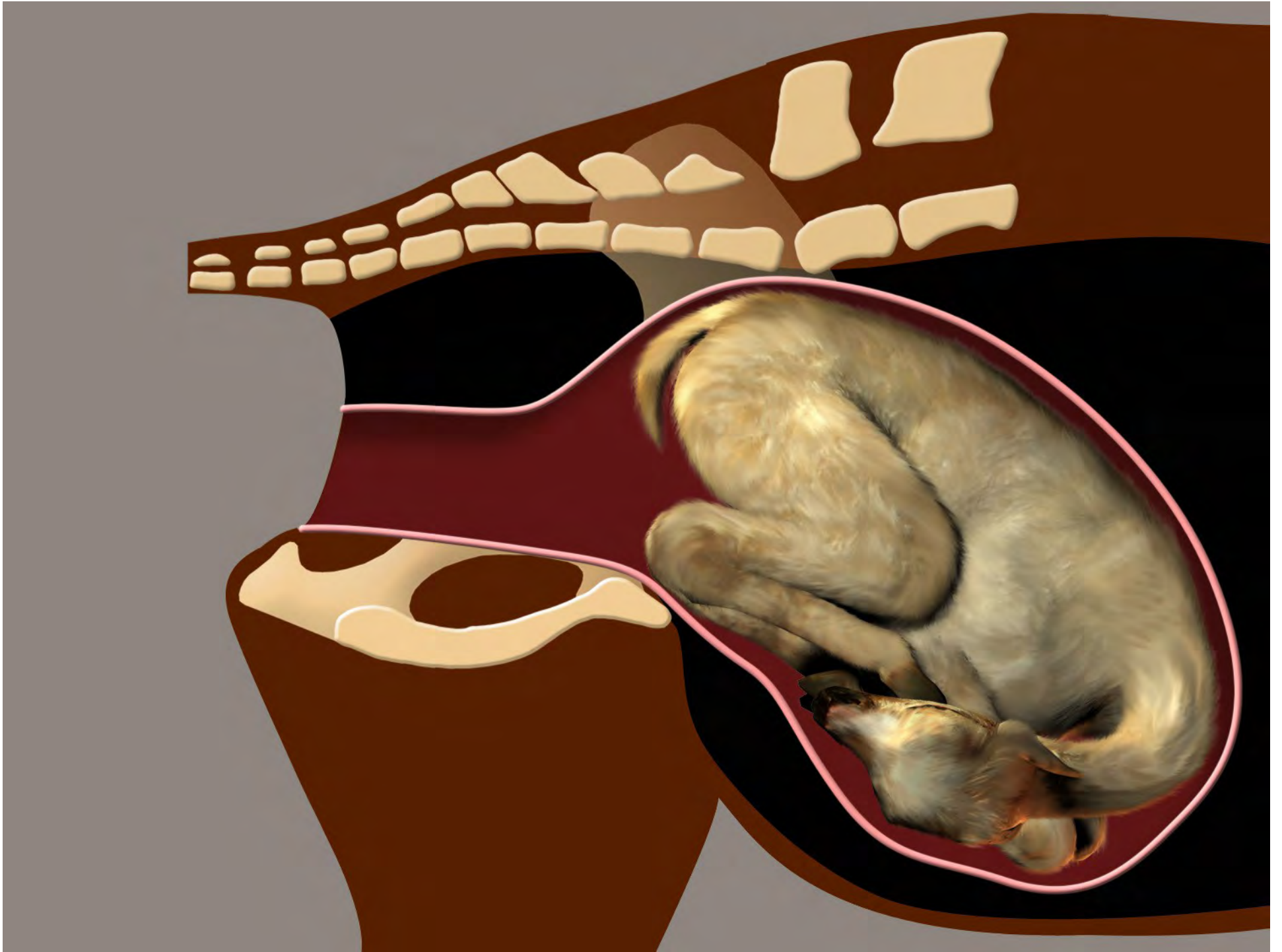


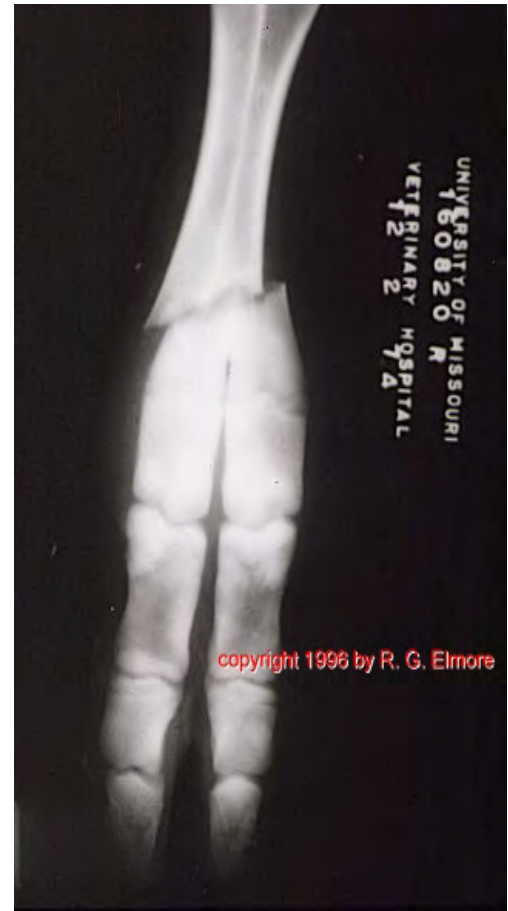
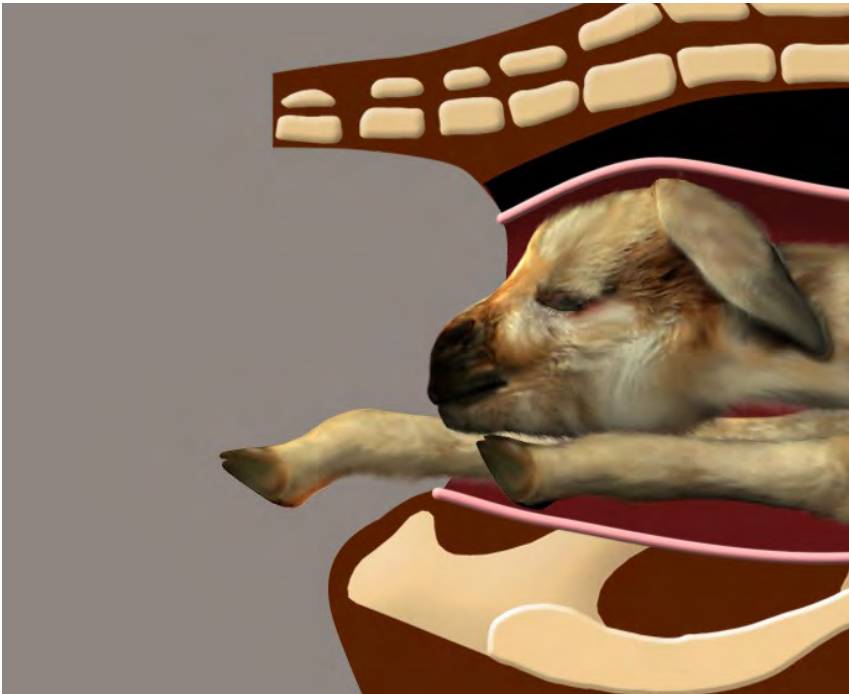












Difficult Birth

- ⦿ What to know when you call
 - First time mom or number of previous crias
 - Problems before
 - Due date
 - What parts of cria you have seen
 - How long have you been watching

Difficult Birth

- ⦿ What to do until the vet evaluates
 - Keep mom still; load quietly and gently
 - Have warm water and towels ready



Not Passing Placenta

- ⦿ Needs to be evaluated if has not passed by 6 hours after birth
- ⦿ Wrap tail and clean dam
- ⦿ Get cria nursing



The Normal Cria

⦿ Neonate:

- Should stand and nurse within 2 to 4 hours
 - usually within 30 to 60 minutes
- Should nurse colostrum
 - 5 % Body Weight within 12 hours
 - 10 % Body Weight within 24 hours
- Should nurse 1-4 times per hour



The Normal Cria

- Birth weight
 - Alpacas: > 5.5 kg
 - Llamas: > 9 kg
- Dam exam
- Dip Navel
 - 0.5 % chlorhexidine
 - If ligation is required, no more than 1-2 hours and away from body wall



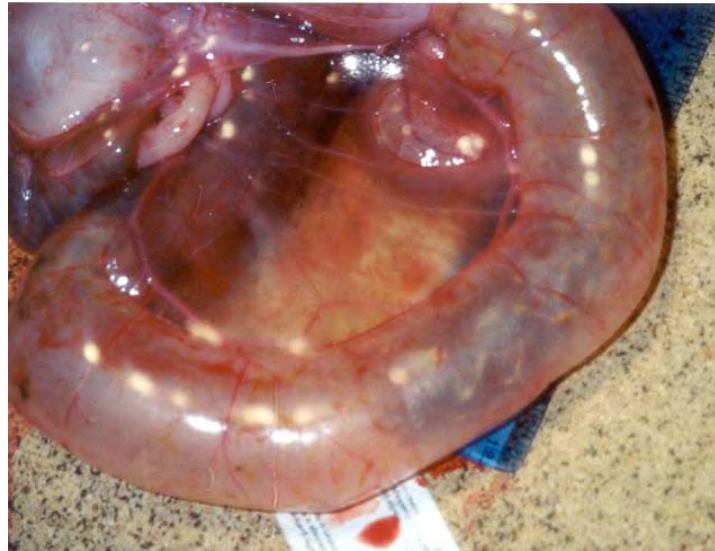
Weak, Not Nursing Cria

- ⦿ What it may mean
 - Low blood sugar, starvation
 - Sepsis – infection
 - Metabolic derangement



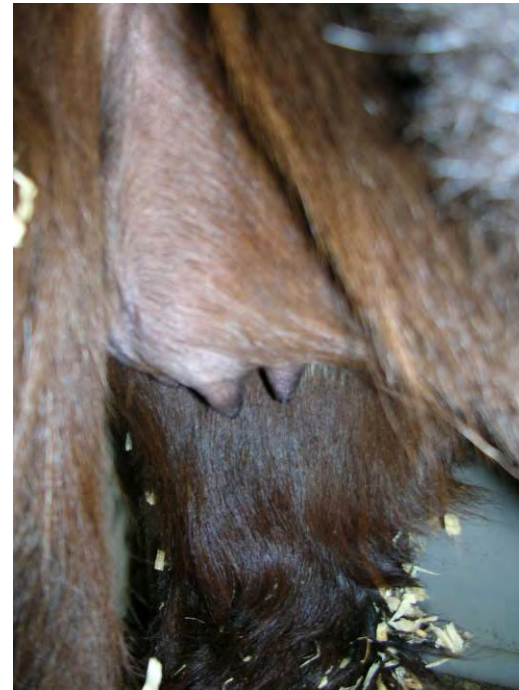
Weak, Not Nursing Cria

- ⦿ Is it an emergency?
 - Yes
 - Not much reserve fat for energy



Weak, Not Nursing Cria

- ◉ What to know when you call
 - When last saw nursing
 - Cria age
 - Dam age
 - Status of dam's udder



Weak, Not Nursing Cria

- ◉ What to do until the vet evaluates
 - Keep warm if temperature below 98°



Lameness

- ◉ What it may mean
 - Muscle strain
 - Laceration
 - Arthritis
 - Joint infection
 - Fracture
 - Foreign object
 - Neurologic disease



Lameness

- ⦿ Is it an emergency?

- Yes, if:

- Break in skin, not bearing any weight, bone sticking out, swelling over joint

- Should be evaluated promptly if:

- Will walk, but painful
- None of the above are present



Lameness



- ◉ What to know when you call
 - Front leg or back leg
 - Mild pain, won't bear weight, won't put down
 - Swelling above or below elbow or hock
 - Bone sticking out
 - Bleeding

Lameness

- ◉ What to do until the vet evaluates
 - Avoid moving if obvious fracture
 - Splint
 - Pressure on bleeding



Bone

Trauma

- ⦿ What it may mean
 - Dog bites
 - Lacerations
 - Fractures



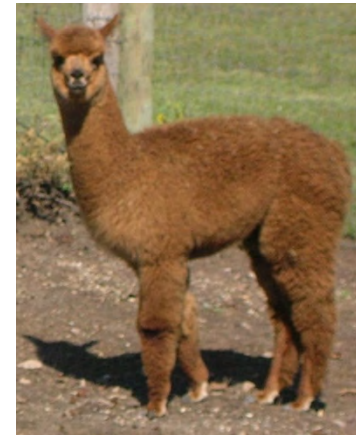
Trauma

⦿ Is it an emergency?

- Yes
- Antiinflammatories and antibiotics are more effective if given early
- Only fresh lacerations can be closed effectively
- Possible fractures should be stabilized immediately

Trauma

- ◉ What to know when you call
 - What trauma occurred, if known
 - When last time seen normal
 - Locations of all wounds
 - Active bleeding and where
 - Obvious fracture and where
 - Can the animal walk
 - Date of tetanus vaccination



Trauma

- ◉ What to do until the vet evaluates
 - Pressure on bleeding
 - Keep wounds clean
 - Stabilize fractures



Eye Drainage

- ⦿ What does it mean
 - Can be normal
 - Ulcer, blocked ducts, tumors, infection, inflammation, foreign body
- ⦿ When do you call the vet?
 - Animal is squinting
 - Eye is red
 - There is a lot of drainage
 - Animal is rubbing the eye



Eye Drainage



- ⦿ Is it an emergency?
 - Should be seen within a day or so

- ⦿ What to do until vet arrives
 - Keep in dark, quiet, undusty place



Administering Medications

- Oral medications



Administering Medications

- Intramuscular Injection



Administering Medications

- Subcutaneous Injections




Administering Medications

- Subcutaneous Injections



Mid-America Alpaca Foundation Exam Checklist



ALPACA FOUNDATION

785.532.5700

My Veterinarian:

Name: _____

Phone number: _____

Emergency number: _____

Alpaca name: _____

Age: _____

Sex: ☐ Male ☐ Female ☐ Gelding

Problem: _____

How long has it been going on? _____

☐ Same ☐ Worsening ☐ Better

Have you given treatment? ☐ Yes ☐ No

What medication(s)? _____

How much? _____

Effect: ☐ None ☐ Improved ☐ Worse

Other animals with similar illness? ☐ Yes ☐ No

This animal sick before? ☐ Yes ☐ No

How long has this animal been in this herd? _____

New animals in herd? ☐ Yes ☐ No ☐ When? _____

Nutrition: Pasture/hay _____

Grain/supplement _____

Mineral _____

Water source _____

Any changes? ☐ Yes ☐ No

When? _____

Vaccination: Product _____

When? _____

Deworming: Product _____

When? _____

Last shearing: _____

Body temperature: _____ **Weight:** _____ #

Behavior: ☐ Normal ☐ Acts Blind ☐ Depressed

☐ Excited ☐ Head up ☐ Head down

Eating: ☐ Normal ☐ Less ☐ Not at all ☐ More

☐ Grain only ☐ Hay only

Weight: ☐ Normal ☐ Fast loss ☐ Slow loss ☐ Gain

Breathing: ☐ Normal ☐ Fast ☐ Noisy ☐ Slow

☐ Increased effort ☐ Puffing nose/lips

Coughing: ☐ None ☐ Dry ☐ Wet

How often? _____

Runny nose: ☐ No ☐ Clear ☐ White/yellow

Runny eyes: ☐ No ☐ Left ☐ Right ☐ Clear ☐ White

Gums: ☐ Pink ☐ White ☐ Sticky

Pregnant? ☐ Yes ☐ No

How far along? _____

Problems before? ☐ Yes ☐ No

Discharge? ☐ Yes ☐ No

Raising cria? ☐ Yes ☐ No

How old is cria? _____

Breeding male: In with females? ☐ Yes ☐ No

How many females? _____

Stool: ☐ Pellet ☐ Clumped pellet ☐ Dog-like ☐ Pudding

☐ Watery ☐ Blood ☐ Black

Abdomen: ☐ Normal ☐ Bigger ☐ Sunken in

Urine: ☐ Normal ☐ Haven't seen ☐ Straining

☐ Yellow ☐ Red ☐ Brown ☐ Cloudy

Udder: ☐ Normal ☐ Firm ☐ Warm ☐ Cold ☐ Pain

Milk production: ☐ Normal ☐ Less ☐ Off color/texture

Umbilicus (cria): ☐ Normal ☐ Wet ☐ Swollen ☐ Draining

Lame: ☐ Right ☐ Left ☐ Front ☐ Rear

☐ Mild pain ☐ Won't bear weight

☐ Won't put down ☐ Wobbly ☐ Weak

Swelling: ☐ Above / below elbow

☐ Above / below hock

☐ Bone sticking out ☐ Bleeding

Swellings: Side of body: ☐ Right ☐ Left

☐ Head ☐ Neck ☐ Leg ☐ Chest ☐ Abdomen

Bleeding: Side of body: ☐ Right ☐ Left

☐ Head ☐ Neck ☐ Leg ☐ Chest ☐ Abdomen

Created by: Meredith Jones DVM, MS • Kansas State University • Veterinary Medical Teaching Hospital

Mid-America Alpaca Foundation

Exam Checklist

- ◎ <http://www.midamalpacafoundation.com/downloads/checklist.pdf>
- ◎ The Foundation makes this available to all farms free of charge and sponsors veterinary student education at three universities
- ◎ Consider a donation to the Foundation in exchange for the use of this resource