VINEYARD VALAIS
SWISS LEGACY SHEEP

Health Challenges of Valais Blacknose

VineyardValais.com

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VINEYARD VALAIS

Agenda

01 HEALTH TOPICS

02 PRACTICAL GUIDES

03 LIVE DEMONSTRATION

04 QUESTIONS

Introduction

Autumn Badelt-Fanning DVM

Entrepreneur & Operations Leader

Founded, scaled, and sold a pioneering mobile veterinary company; later served as VP of Operations leading national & international teams.

Vineyard Owner

Co-founder of The Six — a 40,000-vine, 30-acre red wine vineyard in Paso Robles, built on regenerative agriculture principles.

Valais Breeder

Founder of Vineyard Valais, advancing elite genetics and domestic IVF for rare Swiss Valais Blacknose sheep. Switzerland and UK trained in Valais assessment.

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Brittle Bones

- Unexplained pathological fractures in newborns and fractures and bowing of legs in older lambs
- Possible genetic disorder of collagen formation → fragile, thin bones (Investigate Osteogenesis Imperfecta-has been diagnosed in UK and Switzerland)
- Vitamin and mineral deficiencies apparently contribute and can be corrected to prevent particularly in older lambs

Clinical Signs & Diagnosis

- Multiple limb fractures in very young lambs
- Older growing animals begin to have bowing/bending of limbs
- Soft/flexible ribs and sternum
- Radiographs: thin cortices, weak bone structure
- Confirmed by pathology/histology/Possible genetic testing in future

Management & Prevention

- Evidence that Vitamin D supplementation daily or periodic injectable/oral supplementation at bolus doses is preventative
- Mineral Balancing (Copper/Cobalt and Selenium in particular appear to be influential)
- Genetic monitoring essential as breed develops to determine if there is a heritage component

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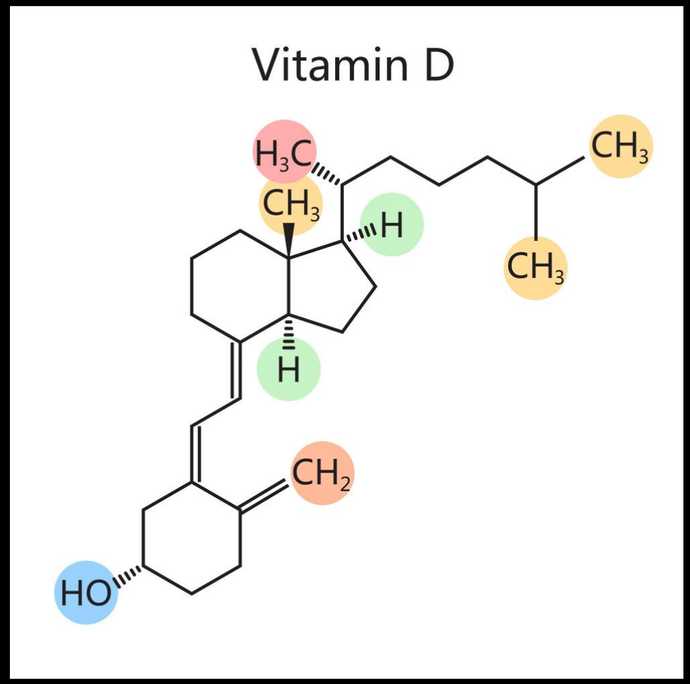
Vitamin D Dosing



Courtesy of Maurita Tauni DVM

- Pregnant Ewes: 6,000 IU/Kg 4-7 weeks before lambing
- Newborn Lambs: 50,000 IU total at birth
- Maintenance Dosing 2-4,000 IU per day for weaned and adult animals
- If daily dosing is not possible every 2 weeks is next best, not less than once per month is recommended
- For less frequent dosing multiply daily dose by number of days and give bolus, there is some evidence that daily dosing is better however
- Sources: Injectable A/D/E (not every dose), Oral Sunshine Drench, human products are used by some.

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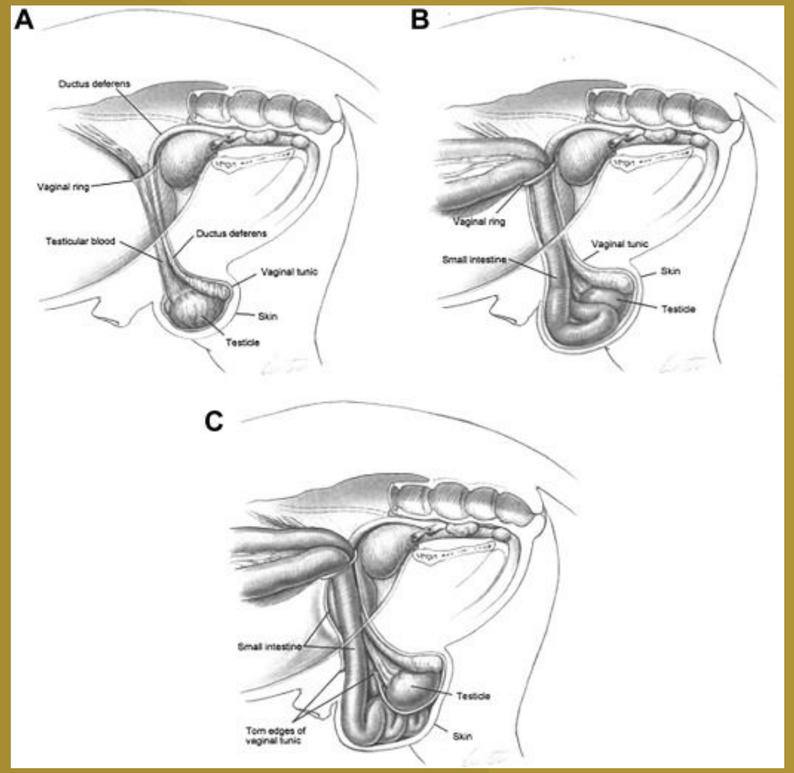
Scrotal Hernias



Definition

- Abdominal contents (intestine) protrude into scrotum via inguinal canal
- Caused by a weakening of the abdominal wall in the area of the inguinal ring as large bodied rams age
- Reduces fertility & sperm quality
- Causes swelling, pain, welfare concerns
- Often hereditary, avoid breeding

Clinical Signs & Diagnosis

- Enlarged, asymmetric, soft scrotum
- Differentiate from hydrocele, orchitis, torsion
- Palpation + ultrasound

Management & Prevention

- Surgery possible
- Careful sire selection & exclude affected rams from breeding

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Internal Parasites

- Worms and Coccidia harm sheep by consuming nutrients and damaging tissues.
- PUT YOUR HANDS ON THEM-weight loss in Valais is insidious
- Resistance to dewormers is an increasing problem worldwide

Clinical Signs & Diagnosis

- Diarrhea, weight loss, bottle jaw, pale mucous membranes (anemia)
- Diagnosis: fecal egg counts, FAMACHA scoring

Management & Prevention

- PREVENT PREVENT PREVENT
- WORK WITH A VETERINARIAN
- Healthy animals are the most parasite resistant animals, good feed/minerals/stress reduction cannot be overstated
- IDEALLY: Strategic deworming based on fecal testing, not routine blanket treatment, but again prevention is key!
- Rotate pastures, avoid overgrazing, biosecurity
- Select for parasite-resistant genetics-not practical yet for Valais
- Monitor effectiveness to prevent drug resistance

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Urinary Calculi

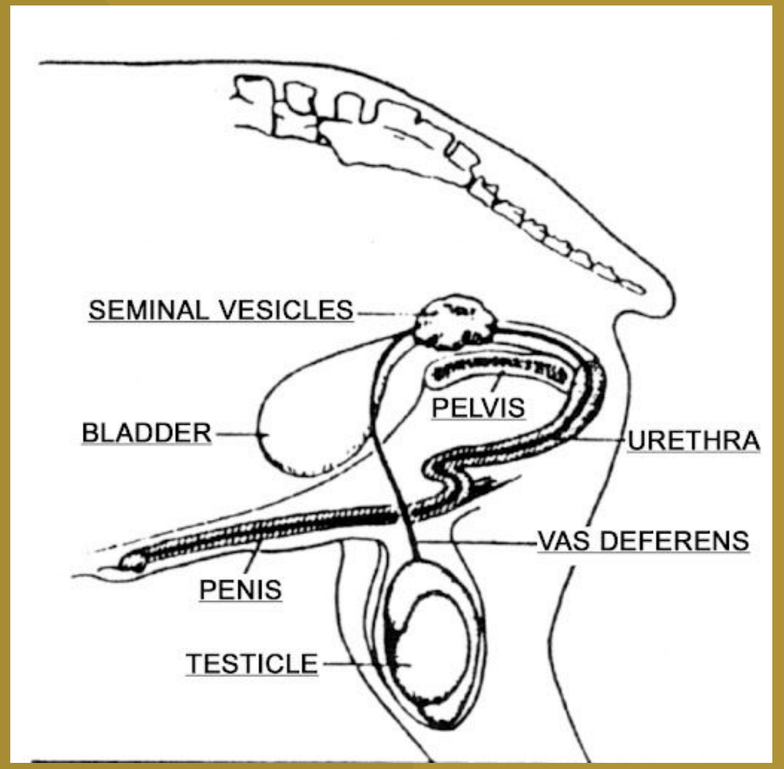
- Blockage of urinary tract by mineral stones
- Common in rams/wethers on high-grain or imbalanced diets
- Painful, life-threatening condition- THIS IS A TRUE EMERGENCY
- Leads to bladder rupture or kidney damage
- Higher risk in confined/show animals fed concentrate rations

Clinical Signs & Diagnosis

- Straining to urinate, dribbling urine
- Swollen prepuce or abdomen
- Restlessness, colic-like signs
- Diagnosis via exam or ultrasound
- IF A WETHER OR RAM IS ACTING SICK ALWAYS MAKE SURE THEY ARE URINATING

Management & Prevention

- Emergency: surgery (tube cystotomy, perineal urethrostomy) or euthanasia if severe
- Prevention:
  - Balanced Ca:P ratio (2:1)
  - Provide clean water + salt to encourage urination
  - Limit grain, increase forage
  - Add urinary acidifiers (ammonium chloride) to diet



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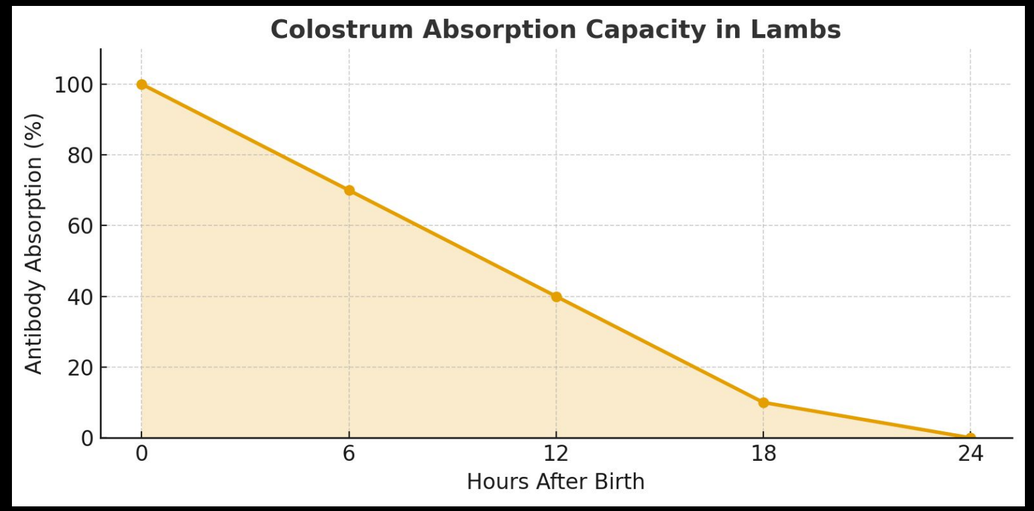
Failure of Passive Transfer

- **Colostrum** = first milk, rich in antibodies, energy, and nutrients
- **Passive transfer** = newborn lamb absorbs antibodies (IgG) from colostrum into bloodstream
- Lambs are born with **no antibodies** they rely entirely on colostrum, they cannot cross the placenta
- Absorption only effective in first **12–24 hours** (“gut closure”)
- Failure of passive transfer (FPT) = ↑ risk of infections, weak growth, early death



Key Benefits of Colostrum

- Provides immunity
- Energy for thermoregulation → prevents hypothermia
- Growth factors, vitamins (A, D, E), minerals (selenium)

Best Practices

- **Timing**: first feed within 2 hours of birth
- **Volume**: 10% of lamb’s bodyweight in first 24 hours
- Use ewe’s colostrum, or high-quality frozen/ commercial replacer if needed
- Find a ewe with extra early in lambing season, milk her and freeze colostrum. Be sure to warm colostrum slowly, do not ever microwave or boil as it destroys the antibodies

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Tube Feeding Lambs

- Delivering colostrum/milk directly to the lamb’s stomach via an orogastric tube
- Used when lambs are too weak to nurse or won’t suckle
- Colostrum within first 2 hours = antibodies + energy critical for survival
- Prevents hypothermia, starvation, and failure of passive transfer

Clinical/Handling Setup

- Lamb should be upright, head in neutral position (not over-extended)
- Use a clean, flexible stomach tube and syringe
- Measure tube: tip of nose → last rib = correct insertion length

Procedure

1. **Prepare**: Warm colostrum or milk/replacer (39–40°C), clean tube/syringe
2. **Measure & mark tube** for safe depth
3. **Insert tube** gently into mouth → esophagus (not trachea) LEFT side of neck you will feel tube go down
    - Confirm placement: no coughing, you can feel tube along left side of neck, Suck back on tube for negative pressure if possible
4. **Deliver colostrum** slowly (50 mL/kg in the first 6 hours of life divided into feedings of up to 60ml)
5. **PINCH and Withdraw tube** carefully after feeding

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Contracted Tendons

- Tendon abnormalities at birth lambs knuckle over
- Affects mobility, nursing ability, and early growth
- Can predispose to joint damage or infections if severe

Causes

- **Nutritional imbalances** in ewe (selenium, copper, manganese deficiencies)
- **Developmental issues**: premature or oversized lambs, in-utero positioning
- **Infectious/toxic** causes (less common but possible via intrauterine stress)

Management

- Mild cases often self-correct in 1–2 weeks
- Good Idea to give a shot of BoSe (Selenium and Vitamin E) to lambs, depending on selenium in soil/feed available to ewes pre-birth
- Support: controlled exercise, good footing
- Splinting or bandaging in moderate/severe cases
- Correct mineral balance in ewe diets for prevention

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Splinting Contracted Tendons

Step 1: Assess

- Confirm contracted tendons (not fracture/infection)

Step 2: Pad

- Wrap thin layer of cotton or soft padding around lower leg

Step 3: Splint

- Place lightweight support splint at the front of the legs. Moldable aluminum split material works very well and is readily available.

Step 4: Secure

- Apply vet wrap/tape firmly but not tight and ALWAYS over splint or padding, use flexible tape at the top if needed (Elastikon). Unwind tape from roll first.

Step 5: Monitor

- Check daily for sores/swelling
- Remove splint after 5–14 days, or when lambs can stand normally without splint

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Blood Collection

- Collection of blood (typically from the jugular vein) for pregnancy tests, health testing, disease monitoring, or genetic programs
- Safe handling minimizes stress and prevents injury to both sheep and handler

Clinical/Handling Setup

- Restrain sheep securely, Ideally with another person
- Extend neck slightly to expose jugular groove

Procedure

1. **Prepare**: Sterile needle (18–20g, 1 inch), vacutainer or syringe, clean collection tubes
2. **Locate jugular vein**: Groove runs down side of neck, in front of windpipe
3. **Occlude vein**: Apply gentle pressure at thoracic inlet to make vein rise
4. **Insert needle**: Bevel up, ~30–45° angle into vein
5. **Collect sample**: Allow vacuum tube/syringe to fill
6. **Finish**: Remove needle, apply pressure, label tube clearly

Figure 3. Notice how the animal's eye lines up with its vein (see arrow).

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Demo Time!

Blood Collection

Splint Application

Lamb Tubing

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Thank you

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