



ANIMAL HEALTH NOTES

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Health Conditions Common to Show Animals

Introduction

The following is a review of common health problems of show animals. It is not intended to be a treatment guide. I really encourage agents and parents to work closely with a local veterinarian.

CATTLE

Digestion in the fore stomachs of ruminants is accomplished by bacteria and protozoa organisms. Whenever an excessive amount of feed is consumed streptococci and lactobacilli bacteria can convert carbohydrate feeds to large amounts of lactic acid. Lactic acid causes a chemical burn to the stomachs and kills the rumen organisms.

This condition is known as grain overload or lactic acidosis. It is an acute indigestion which is often fatal within hours or causes a debilitating condition with liver abscesses and laminitis of the feet (founder).

Less severe or borderline lactic acidosis causes an "on again-off again" feeding problem as appetite varies. These animals are more susceptible to salmonellosis and clostridial enterotoxemia. Finely ground feed and insufficient long stem fiber ("effective" fiber) in the ration are factors which increase the potential of lactic acidosis.

Regular feeding habits and gradual phasing-in of new feeds is recommended in prevention. Acute lactic acidosis must be handled as an emergency. Veterinary treatment regimes include pumping several gallons of water into the rumen and immediately recovering it through a large bore tube. This is repeated several times. One to two pounds of activated charcoal in several gallons of water can be pumped into the rumen and is an effective treatment. Several liters of fluids IV may be necessary.

Lameness....Laminitis (Flounder) and Ephysitis

Laminitis or founder results from over-feeding grain. The blood supply to the tissues inside the hooves is compromised. The animal is lame. Complete recovery may not occur. The hooves may require special trimming and care within two to three months after the acute lameness develops. Ephysitis is a condition of rapidly growing, grain and protein fed calves. It involves the ends of long bones. Reducing the amount of energy and protein fed often leads to recovery in a few weeks.

Chronic Bloat

A recurring problem in steers primarily. Feed should be coarsely ground. Feed some hay each day. If they have been without water all day, don't feed them then allow free choice water. A special vented screw can be placed through the abdominal wall but this may not be acceptable for aesthetic reasons. Eat the steer!

Respiratory Disease

This is the most vulnerable body system to serious infection. A number of viruses, bacteria, and mycoplasma

are involved in the Bovine Respiratory Disease Complex (BRD). Young cattle moving to and from shows are likely to become ill with a cough, fever, nasal discharge, and poor appetite. Pasteurella hemolytica bacteria causes secondary pneumonia and is the killer. For cattle, reliable antibiotics include Naxcel, Micotil, Excenel, Nu-Flor, and Baytril. Successful treatment of acute pneumonia in any species of animal depends on early diagnosis and prompt administration of an effective drug at adequate dose level. The antibiotic level in the tissues must be maintained for 5 days or longer. Chronic cases result when treatment is started too late, when the right dose of antibiotic is not given in order to maintain levels within the lung, or when treatment is discontinued too early.

Successful immunization of young cattle includes vaccines against Blackleg, BVD, IBR, BRSV, P1-3 virus and pasteurella hemolytica bacteria. If the vaccine is the "killed type vaccine" it is imperative that 2 doses are given at 2 to 4 week intervals. More than 8 weeks is too long. One dose as primary vaccination does not immunize the animal.

Deworming Show Cattle

Steers can be treated once or twice with ivermectin or another highly effective product (see products section ...sheep). Steers maintained in drylot will not need further treatment.

Pastured dairy and beef animals can be treated just before going on to pasture. A second treatment in four to six weeks is recommended. Treatment quarterly should be sufficient as long as they are in good body condition. Calves and yearlings should not graze on pastures with older cattle or on pastures where older cattle were recently grazed. In other words don't rotate young cattle behind older ones. Treatments indicated above may be more than actually needed.

Urinary Stones

Steers are at risk of developing stones in the urinary system. Stones may lodge in the urethra, causing urine to back up into the bladder and kidneys. Eventually the bladder will leak and urine will accumulate in the abdomen. The diet must contain adequate calcium and the ratio with phosphorus should be 1:5:1

SHEEP

Overeating Disease

Acute, rapidly fatal disease produced by toxins from clostridia bacteria in the intestinal tract. As a preventative give two doses of vaccine two to four weeks apart then booster at six month intervals.

Grain Overload

See cattle

Urinary Stones

See cattle. Ammonium chloride can be added to the diet as a preventative but it is not always effective. It acts as a urinary acidifier. Every fall we see several lambs with urinary blockage. Some respond to removal of the urethral process whenever it is plugged. This is the almost thread-like extension of the urethra. When a wether lamb loses its appetite and looks to be uncomfortable it may have stones. Is this lamb urinating freely...not dribbling? This condition is an emergency situation.

Respiratory Disease

Pasteurella bacteria are the main concern. Not a major problem in show sheep. Naxcel or Excenel antibiotics as for cattle.

Polioencephalomalacia

"Polio" is not uncommon in lambs on feed. The lamb is blind, may stagger, looks up at the sky, and may have convulsions. Often the history is that there was a feed change a few days earlier. The lamb may have had a

mild grain overload, with diarrhea and no appetite for two or three days. Prompt treatment with 1000 milligrams of vitamin B1 in the muscle is indicated. Continue to treat at 12 hour intervals until it dies or is essentially normal. Overeating disease may look like polio but does not respond to treatment.

Stomach Worms

A major killer of lambs and ewes is the Barber Pole worm, *Haemonchus contortus*. Adult worms in the true stomach (abomasum) produce thousands of eggs per day. Eggs pass in the stool and hatch, and develop into infective larvae in a few days. Grazing sheep eat the larvae. Larvae develop into blood sucking egg layers in two weeks. The whole cycle can be completed in 21 days.

The large stomach worm can bleed out sheep and goats in a few days when heavy infestation occurs. **Learn to take your thumb and role the lower eyelid down to evaluate the color of the tissues on the underside. The tissue should be a deep pink when the animal has normal blood. Pale to snow-white indicates anemia.** Severe anemia may prove fatal even though the problem is recognized and the animal is dewormed.

Larvae survive on grass for weeks or months during warm, wet weather. There will be a rapid accumulation of larvae in the grass unless all sheep in the group are treated with ivermectin before putting them on pasture. The pasture may become dangerous for sheep and goats.

The barber pole worm rapidly develops resistance to deworming drugs. Three classes of drugs are available based upon their mechanism of killing worms. Ivomec, Dectomax, Cydectin and Eprinex are in one class. Valbazen, Safeguard, Panacur and oxyfendazole (Synanthic) are in a second class. Levamisole (Tramisol) and morantel (Rumatel) are in a third class. Not all of those are officially labeled for sheep and goats. Morantel has just recently been approved for use in the feed for goats.

Frequent deworming allows worms resistant to a drug to become the dominant population. That is especially true when the effectiveness is not 100% to begin with. Sheep added from another herd may bring resistant worms with them! **Frequently changing classes of drug will speed resistance to all of them.** Effectiveness can be monitored by having a veterinarian examine stool samples for worm eggs from treated sheep about 7 to 10 days after treatment.

Lamb Fungus (Ringworm)

This is a pesky skin condition that has plagued show lambs in recent years. It is cause for rejection from a show if the disease appears to be active and untreated. The ringworm lesion is round, crusty and wool is lost. Regrowth wool is often black. People are really susceptible to this ringworm. Perhaps in the near future a vaccine will appear on the market as a preventive. Ringworm is easily spread on brushes, combs, blankets and by direct contact. Immunity develops after a period of weeks. Treating individual lesions turns into a round robin of sorts because new places pop up.

ORF or Sore Mouth

The medical name is contagious ecthyma. A virus infection which most sheep must go through. The lips swell and scabs form. Scabs contain virus which will survive in barns and pens for years. Lesions may form around the feet or on the ears. Most will heal in two weeks or so. Vaccine..the live virus ...is available. People are susceptible.

Lame Lambs

Foot rot is a common cause of lameness. A lamb that is not eating, lame in all four legs, and has red, watery eyes probably has stiff-lamb disease...Chlamydia infection. This will spread to other sheep and calves. Tetracycline injection is indicated once the diagnosis is made.

Another cause of lame lambs is chronic hyperthermia which is seen in the heat of summer. These lambs have a hump in their back in the loin region and they prefer to lie down. Muscle damage occurs in the loin and rear limbs. These lambs have a high body temperature (>104 degrees) for several days before the lameness appears. They frequently are breathing more rapidly because of their "fever." This problem appears during extended periods of high heat index. Shear them, put them in a cooler environment and give 200 units of vitamin E by mouth daily.

Copper Poisoning

Dairy feed, calf manna and other feeds may be high in copper for sheep. The controlling factor is the amount of the element molybdenum in the feed. Sheep will accumulate copper in their liver whenever the copper: molybdenum ratio in the diet exceeds 10 to 1. For example, if the feed contains 0.5 ppm molybdenum a level of 10 ppm copper is too much.

After being on a copper accumulating ration for a number of weeks some lambs will suddenly have reddish brown urine, the whites of the eyes becomes yellow and they are very sick. Few survive.

Molybdenum is not approved for use in feeds but FDA has been allowing its use in sheep rations.

Cottonseed Meal

Lambs are quite sensitive to gossypol poisoning. CSM should not be used at more than one-half of the protein supplement in the ration. Gossypol affects the heart, causing sudden death in lambs.

PIGS

Respiratory

Pigs may have chronic pig pneumonia which dates back to the nursery. A cough is present when the pig first gets up and moves about. The cause is mycoplasma, a bacteria-like organism common to the majority of pork producer operations. Tetracycline and tylosine antibiotics can suppress the effects. Secondary pneumonia with *Pasteurella multocida* or *Actinobacillus pleuropneumoniae* is a serious sequel. These diseases do not occur often in show pigs. Naxcel, Excenel or Nu-Flor are the drugs of choice for these two.

Influenza

May strike in show pigs during fall or winter shows. A harsh cough, high fever and lethargy are typical. Most recover in a few days. Vaccination may be useful in show pigs.

Gastro-Intestinal

Stomach ulceration and the hemorrhagic form of *Campylobacter* infection may cause bleed-out into the stomach or intestine. A black tarry stool and a very weak, animal is the result of either condition.

Swine Dysentery..Bloody Mucoïd Scours

This is one of those serious infectious diseases which can kill pigs. The signal is sudden off-feed, an empty appearance to the stomach and bloody diarrhea containing mucus. The feces contain billions of *Treponema* bacteria which cause the disease. The sick pig(s) should be separated from the others and the pen washed down. The water additive drug, Denagard Water Soluble, is highly effective as a treatment. Treat all exposed pigs as well. **Don't** track swine dysentery to another pen or farm!

Transmissible GastroEnteritis (TGE)

This is a corona virus disease which will kill virtually 100% of baby pigs under two weeks of age. It is easily spread on clothing and boots. Pigs returning from shows to a farrowing operation can obliterate a pig crop. A less acute form also seen once a farrowing operation becomes chronically infected. Vaccines are helpful but to

date have not achieved more than a reduction in death rate (40-50%).

Erysipelas

The bacteria which causes this disease is carried in the intestinal tract. In show pigs, rhomboid to rectangular, raised wheals that are dark red suddenly appear on the back. The pig is sick, feverish and may be lame. Penicillin at recommended dose for at least three days. Vaccines are effective.

Lame Pigs

Rapidly growing pigs may develop osteochondrosis involving long bones. Lameness can be severe. They may lay around for two weeks then gradually begin to improve. They may need TLC...bring food and water, keep them in shade.

Pigs fed only corn and meal will develop rickets. What are they actually being fed?

Whipworms

Whipworms can be a stubborn problem where pigs are housed on dirt. The eggs survive in the dirt and reinfect pigs after treatment. Signs of whipworms include mucus and blood in the stool. Some pigs are virtually allergic to whipworms and have loose stool and will not grow (or lose weight!) until the problem is corrected. Levamisol (Tramisol, Levasole) is a good treatment.

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