Are goats really just small cows? How a cattle veterinarian can use their skills for small ruminants

Andrea Mongini, DVM MS
M&M Veterinary Practice, 5213 S Gratton Road, Denair, CA 95316

Abstract

Many bovine veterinarians are hesitant to treat small ruminants, leaving sheep and goat breeders calling horse veterinarians for services. Sheep and goats are food animals and should be treated as such. Veterinarians are generally well respected and have the ability to influence producers with their knowledge. The commercial goat and sheep industries stand to benefit from working relationships with food animal veterinarians.

Key words: small ruminants, goats, practice management

Overview and Discussion

Many bovine veterinarians are hesitant to treat small ruminants, leaving sheep and goat breeders calling horse veterinarians for services. Sheep and goats are food animals and should be treated as such. Veterinarians are generally well respected and have the ability to influence producers with their knowledge. The commercial goat and sheep industries stand to benefit from working relationships with food animal veterinarians.

To summarily generalize the difference between sheep, goats, and cattle, let’s start with a few basics. Goats and sheep get ‘milk fever’ just like cattle. They even have similar signs when they have it. There are a few important differences: 1) they more often experience hypocalcaemia prepartum in the close-up period (last 3 weeks of gestation); 2) postpartum, the presenting complaint is often lack of milk production; and 3) calcium gluconate can never be given IV; instead give it SQ.

Fat goats and sheep develop fatty livers just like cows, but they experience the disease in the prepartum period instead of fresh period; we call it pregnancy toxemia. The treatment is the same for goats and sheep as it is for cattle. Early hepatic lipidosis is treated with propylene glycol orally. More severe cases require IV fluids with dextrose and calcium gluconate SQ.

Small ruminants are well adapted to their disease-causing organisms, which means they get them and keep them for life. You almost don’t have to know what the organism is. Plan on never curing it, and then use your best calf-raising skills to teach the producer how to keep the next generation from contracting the disease. Sheep and goats can be in production by 12 months of age, versus 2 years for a heifer. With a kidding rate of 200%, it is possible to turn a whole herd over in 2 years, when culling is factored in.

If you know how to palpate cows, you can roughly ultrasound-diagnose pregnancies in small ruminants. When the screen is set to 1 cm measurements, the size of the fetus is ‘similar’ than what you would palpate. In other words, a hamster-size fetus is still 60 days. This rule holds from 34 to 65 days, at which point it is no longer accurate. After 60 days, multiples versus singles versus breed cause a high amount of variation in fetal size. Sheep tend to have a larger fetal size by 2 days due to the shorter gestation length, also. Most clients will be comfortable with 3, 3.5, 4-month estimates. Many ultrasound have crown-rump length and biparietal diameter measurements programmed into them already. As you improve, you can use the standards to become more accurate.

On the spectrum of variation from cattle, sheep are farther and goats are in the middle. This means that goats can contract both sheep and cattle diseases, such as ringworm and Johne’s disease. Sheep are unlikely to contract cattle diseases, except bovine viral diarrhea (BVD). Generally, cattle do not contract sheep and goat diseases although internal parasites can move freely between species.

Conclusions

The small ruminant sector of food animal practice has been continually growing during a time when beef and dairy practices are in a period of contracture. It is enjoyable to work in an industry that is trying to expand and has a promising future. Your knowledge is invaluable and can be put to good use for these producers.