



BeefTalk 715: Grass Tetany

SUPPORTING MATERIALS

Grass Tetany

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— www.merckmanuals.com/vet/

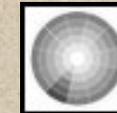
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Lush grass in the spring is something everyone dreams about. However, there is a dark side: grass tetany. Last year, the Dickinson Research Extension Center had all the right conditions for the onset of grass tetany and, sure enough, it was found.

Those conditions were: freshly calved cows, excellent milk production, wet spring, lush grass and cows that needed to be sorted.



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Guess what? This spring is no different.

For areas that have good moisture, such as North Dakota and the surrounding region, the grass is growing and, as the temperature goes up, the grass will grow even more vigorously. The subsequent lush pastures are key to grass tetany problems.

One of my first farm visits as a new county Extension Service agent years ago was to visit a producer in distress because of several dead cows. The dead cows were dotted around the pasture and lying in abundant spring grass. Grass tetany was evident.

If one were to go to the website <http://www.merckmanuals.com/vet/index.html> and browse the section on metabolic disorders, one would find the topic on hypomagnesemic tetany in cattle and sheep. The clinical findings state: "In the most acute form, affected cows, which may appear to be grazing normally, suddenly throw up their heads, bellow, gallop in a blind frenzy, fall and exhibit severe paddling convulsions. These convulsive episodes may be repeated at short intervals, and death usually occurs within a few hours."

As was the case with the producer I was visiting, "In many instances, animals at pasture are found dead without observed illness." Further observation would note, however, that "the cattle had convulsions prior to death as indicated by the straddle marks on the ground."

If lucky, a producer may observe cattle acting unusual as is noted on the Merck website, "... the cow obviously is ill at ease, walks stiffly, is hypersensitive to touch and sound, urinates frequently, and may progress to the acute convulsive stage after a period as long as two to three days. This period may be shortened if the cow is transported or driven to a fresh pasture."

That brings back memories of last year. After working the cows, the cows were let out to their respective pastures. Two cows expressed tetany symptoms and eventually went down. A veterinarian was brought immediately in to help. One cow lived and one cow died.

Grass tetany also is associated with low blood calcium, thus the connection to higher-producing milk cows. Any indication of instability in a nursing cow is an emergency situation. Ketosis (sometimes confused with milk fever at calving) and hypomagnesemia tetany (commonly called grass tetany or grass staggers) are serious metabolic disturbances in cattle, given the setting and time. These are very often fatal without veterinary intervention.

Ketosis generally is associated with a reduced intake of carbohydrate or, more simply put, inadequate feed to support the nutritional requirements of a lactating cow. Like many problems, the root cause is a combination of issues that then are expressed as a crisis.

Serious outbreaks can occur if cattle are borderline deficient in calcium, stressed while working calves or moved from the calving pasture to a lush pasture where dietary magnesium (Mg) absorption maintenance requirements and daily Mg lactation requirements cannot be met.

Unfortunately, a cow does not have a good way to store Mg, so the daily intake is critical or there will be dead cows in the morning.

This spring, we will see copious amounts of lush grass as the weather warms. However, this is grass that may not meet the daily requirement for Mg in the lactating cow, so stay alert. The cow initially responds to these metabolic challenges with nervousness and irritability generally not apparent to the typical watchful eye.

Because of the rapid onset, even in well-managed cows, a quick response and treatment is critical. The tetany or involuntary contraction of muscles is noticeable to the astute eye, especially when cattle are moved. Even if you are challenging a cow just to get out of the way, if there is any sign of slight staggering, it should elicit an immediate response if conditions are right for grass tetany.

Even better, be proactive and realize metabolic issues are critical and without intervention are fatal. Visit your local cattle nutritionist to get a spring pasture mineral that provides a well-balanced mineral program with supplemental Mg specific for spring pasture grazing.

Life's lessons are hard, but the key is to learn and be proactive, not reactive.

May you find all your ear tags.

Your comments are always welcome at <http://www.BeefTalk.com>. For more information, contact the NDBCIA Office, 1041 State Ave., Dickinson, ND 58601, or go to <http://www.CHAPS2000.com> on the Internet.

