Countryside Veterinary Clinic, LLP
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Some highlights from American Association of Bovine Practitioners (AABP) Conference

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I recently traveled to Omaha, Nebraska to attend the American Association of Bovine Practitioners (AABP) annual conference. This year marked the 50th time AABP has hosted this conference and a record number of veterinarians from across the United States and Canada came out for excellent continuing education, a chance to catch up with friends and colleagues, and all the milk they could possibly drink. Over the course of the 3-day conference, I could listen to numerous lectures and talk to industry reps from all facets of the dairy industry to learn about new and upcoming products hitting the market this year. The theme of this year's conference was "What we know that isn't so." Here is a brief summary of three topics that I found most interesting.

Dr. Hans Coetzee of Kansas State University presented a very interesting talk on the emergence of Anaplasmosis as a major disease of concern across the United States. Once thought as a disease that only affected cattle in the southern portions of the country, Anaplasmosis has now been diagnosed in all 48 contiguous states, including NY. And yes, Countryside veterinarians have seen and treated cases of Anaplasmosis in a few herds within our practice range. Anaplasmosis is readily transmitted from cow to cow by ticks, biting flies, and perhaps most importantly, shared needles. If a persistently infected Anaplasmosis cow shares a needle with a naïve cow, there is a very high risk of disease transmission, according to Coetzee. One of the major challenges with the disease is that the incubation period from time of exposure to the time of clinical signs can range from 3-10 weeks. Clinical signs of the disease include fever, lethargy, loss of appetite, loss of manure production, a yellow color to mucous membranes (ie. vulva or gums), abortion, difficulty standing or walking, as well as sudden death in severe cases. Diagnosis requires submission of blood samples to a lab for an Elisa test 6 weeks after exposure or a PCR test which can be performed 3 weeks after initial exposure. New research led by Coetzee and his team has revealed that successful treatment of Anaplasmosis requires prolonged treatment with tetracycline. This can be given in the form of repeated IV and subcutaneous injections of oxytetracycline, or can also be achieved using a VFD and feeding chlortetracycline medicated feed to infected cattle for a minimum of 60 days. For more information regarding Anaplasmosis, please consult with your herd veterinarian.

Dr. Pamela Ruegg from the University of Wisconsin presented some updated research on clinical mastitis. In her talk, Dr. Ruegg reminded us that the detection of clinical mastitis is relying solely on the inflammatory response of the cow. By this, Dr. Ruegg is explaining that we have no idea when the mastitis infection actually happened because we are simply observing the secondary inflammatory response. Furthermore, it is impossible to determine what bacteria caused the mastitis based on milk appearance alone. A milk culture is currently the best method available to determine the underlying cause of mastitis. Dr. Ruegg's research has revealed some very compelling data that displays that the days of abnormal milk in any cow with clinical mastitis, regardless of the inciting cause, typically lasts 3-6 days. This is largely due to the inflammatory response and the physiological and cell signaling changes that occur when a quarter is inflamed.

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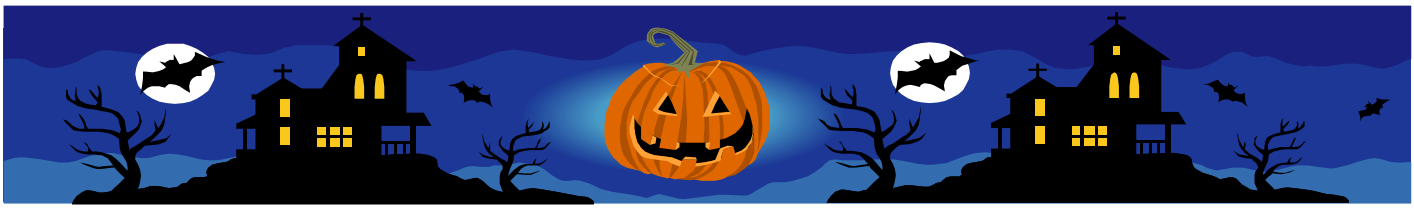
With this in mind, Dr. Ruegg urges that we challenge the use of prolonged therapies with broad-spectrum antibiotics as they are likely not needed for most cases of mastitis. In other words, a 5-day course of Spectramast may be perceived as superior to a narrow spectrum antibiotic, such as Today, solely because most clinical mastitis will be naturally resolved by the end of the treatment duration of Spectramast (once daily for 5 days). Dr. Ruegg is insistent that the presence or absence of abnormal milk should not be the only basis of measuring a successful mastitis treatment. She strongly advocates a culture based treatment protocol. (Butler Creek Dairy Farm) Once a treatment course is selected, a cow that is being treated with a single antibiotic should finish that course of treatment and then be reevaluated if the mastitis does not resolve. This is best accomplished with a repeat culture, to determine if that cow needs further antibiotic treatment or if the continued abnormal milk is simply due to a unusually prolonged inflammatory response. When using a culture based treatment protocol, and selecting the appropriate narrow spectrum antibiotic to target the pathogens that we know will respond to antibiotics, the vast majority of cows will clear with a single course of treatment. Dr. Ruegg suggests that only a very small percentage of cows will continue to have a culture positive infected quarter following a single course of treatment. Have you reviewed your mastitis treatment protocols with your herd veterinarian recently?

Dr. Geof Smith of North Carolina State University presented a talk that dispelled some common myths when treating calf diarrhea. The single most important supplemental therapy that can be given to calves with clinical scours is oral electrolytes and fluids. Dr. Smith warns however that not all oral electrolyte products are created the same and careful consideration should be used when selecting the product you will use on your dairy. An adequate oral electrolyte product needs to supply sufficient sodium, provide agents that facilitate absorption (ie. glycine and acetate) and should also have an alkalinizing agent that can help to correct metabolic acidosis. Calves with scours still need to be fed a complete diet of milk or milk replacer to provide them with the critical energy their bodies need to fight off the offending bugs. Dr. Smith has reviewed hundreds of research studies and has investigated oral antibiotics in his own research and has found NO benefit to continual feeding of medicated milk replacers for the treatment or prevention of scours in calves. Most of the antibiotics used in these products, such as neomycin, have no efficacy in killing off bad bacteria in the gut. Furthermore, all of these products now require a VFD written by your veterinarian to legally use them on your farm. Dr. Smith further advocates that up to 30% of calves with scours, regardless of the underlying cause of scours, will be concurrently bacteremic. This is largely a result of secondary e. coli overgrowth that results from intestinal inflammation and increased release of these E. coli from the gut into the bloodstream. Calves that have scours and are concurrently showing signs of depression, fever, and/or have evidence of failure of passive transfer, should be treated with Excenel once daily for 5 days. Lastly, Dr. Smith's research has shown that many of the yeast cell wall extract products have shown promise in reducing salmonella shedding and improving overall intestinal villi health in scouring calves, but more research is needed to determine if these products are actually improving clinical outcomes for calves treated with scours.



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