VETERINARY CALL

by Bob Larson, Kansas State University

Navel and Joint Ill

Infection of the navel and joints can be detrimental to young calves.

Navel ill or joint ill is a disease in young calves that occurs when bacteria from the environment enters the calf through the navel shortly after birth and causes an infection. If the infection gets into the bloodstream and spreads throughout the body, joints in the legs are likely to become infected, and the problem becomes "joint ill."

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The bacteria that cause navel ill or joint ill are very common, but only cause problems if the calf is born in a dirty environment or does not get enough colostrum. In order for a calf to consume adequate amounts of colostrum, it must be able to suckle within a few hours of birth and then suckle several times over the first 12 hours. Calves with an easy birth stand more quickly, are more likely to bond with their dam and have greater consumption of colostrum compared to calves that require assistance during birth. Proper heifer development, use of high calving-ease EPD (expected progeny difference) bulls on heifers and appropriate cow nutrition are good strategies to decrease the risk of calving difficulty.

In addition to the importance of adequate colostrum, the other important factor is the amount of exposure to disease-causing germs. To ensure calves are born in a sanitary environment, pregnant cows should be moved to a clean pasture just before start of the calving season. A large pasture with good drainage and a natural windbreak is probably all that is necessary for many herds.

Severe weather can add to the risk of disease in young calves, because cattle will often gather into a small area because of excessive snow or surface water or because of repeatedly placing feed and bedding in the same location. These crowded areas rapidly become muddy, which leads to an increased possibility of navel or joint infections in the calves.

Signs of an enlarged and wet navel can occur as early as 1 to 2 days of age. If the infection has moved into the bloodstream, calves may appear depressed and have lameness or swollen joints, cloudy eyes, a poor appetite or diarrhea, or a fever.

Treatment of calves with joint ill that also have signs of nervous system disease is not likely to be successful and euthanasia of the calf should be considered. Calves with more than one infected joint also have a slight chance for recovery.

If the infection is limited to the navel area and has not invaded any joints, treatment with antibiotics for several days and possible surgical removal of the infected area has a good chance of being successful. If joints are involved and treatment is attempted, it must be aggressive. Use approved antibiotics for several days past the time the calf appears to have recovered.

In addition, sick calves may require oral or IV fluids and additional care such as heat lamps, hand-feeding and frequent change of bedding. In some cases, your veterinarian may flush the infected joints several times at 24- to 48-hour intervals. When treatment is aggressive, the cost can be quite high. However, if the calf is severely affected, less than aggressive treatment is not likely to be successful. Obviously, prevention by decreasing calving difficulty and improving sanitation is preferable to death, production loss or high treatment cost for affected calves. AJ

Editor's note: Robert L. Larson is a professor of production medicine and executive director of Veterinary Medicine Continuing Education at Kansas State University.