CALVING EASE

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Poor Doer or ... BLAD?

Sometimes we have a calf who just never seems to improve after a bout with illness. A check by the vet turns up nothing specific. She just becomes a chronic sick calf.

It can be disheartening doing all we can for her and she just doesn't grow. One of the possible causes is genetic. If her dam and sire were both carriers of a genetic defect, she had one chance in four of inheriting this defect from both of them. If she's the one-in-four, her immune system will never function properly.

What is this genetic defect? In 1989 a USDA veterinarian, Mark Kehrli, discovered this immune system defect. In the language of genetics this defect is carried on a recessive gene. That means only animals with two such genes will have the "deficiency." An animal with just one such recessive gene is referred to as a "carrier."

It's called BLAD for Bovine Leukocyte Adhesion Deficiency. Over twenty different bulls have been identified as "carriers" dating back to 1977. For example, Carlin M Ivanhoe Bell is a confirmed carrier that may have daughters in your herd. Fortunately, it's possible to test for this condition. Look for the results on bull pedigrees. If you have registered cattle, your breed association may show on female registrations whether or not the animal is a carrier.

What are the chances of having a calf like this? Even if the dam is a carrier, if the sire is clean (not a carrier) the calf will be okay. That is, the calf can't inherit the defect from both parents if one of them doesn't have it. BUT, what if we have one or more carrier dams in the herd and we run an untested clean-up bull with the late-lactation group? OR, what if we have one or more carrier heifers and we breed heifers with untested bulls? So, unless you have searched dam's pedigrees for carrier bulls the number of carrier females in the herd may be anyone's guess.

Why is the defect so bad? BLAD calves usually have a relatively short lifespan. They seldom live to be one year old. They are more subject than normal to high fevers and scours. These lead to unthriftiness and stunting. The researchers tell us that these calves have unusually high white blood cell counts and lack a protein called MAC-1. This special protein is needed to penetrate the blood vessel walls to combat infections. Thus, the calf that never seems to recover from her last illness.

What can we do about BLAD? First, prevention! We can encourage the use of sires tested to be free of BLAD.

Second, remember that the disease is not infectious. Since it's a genetic defect that fatally hampers the working of a calf's immune system, it can harm only that calf.

Third, for those with registered cattle, your breed association may have begun showing on a calf's registration if she is a BLAD carrier. If she's identified as a "carrier" and has an untested registered sire we might suspect BLAD in the case of unexplained extended illness.

CALF FEEDER'S TIP

How do you measure washing detergents and acids for cleanup? Use the pump on large volume drums? One pump enough or too little? We've found the case from a 60cc syringe a handy measuring devise. Cheap, too. The case can be marked with masking or duct tape to show pre-measured amounts. These help us be consistent, too, rather than using too much one time and too little the next. Also to reduce waste we use a shampoo squirt bottle for dish-wash soap rather than pouring from a gallon jug.

We are indebted to Debra Switzky writing in Holstein World (Nov,'91), "BLAD's Day of Reckoning" for part of the material on BLAD.

If you know of someone that doesn't currently receive **Calving Ease** but would like to, tell them to **WRITE** to Calving Ease, 11047 River Road, Pavilion, NY 14525 or to **CALL** either 585-591-2660 (Attica Vet Assoc. office) or 585-343-8128 (Offhaus Farms Office) or **FAX** (585-591-2898) or **e-mail** sleadley@frontiernet.net or pams91@2ki.net . A limited number of back issues may be accessed on the Internet at www.calfnotes.com and clicking on the link, Calving Ease.