

WHAT IS MASTITIS

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While carrying out a routine visit a week ago, Brian the herdsman commented 'I am having huge numbers of cases of mastitis in nearly all the cows which calve down, nearly 50% of cows are affected'. This sounded very serious indeed and warranted further investigation.

Cows calved down and were healthy and showed no signs of clinical mastitis. The problems started once the cows came in to the parlour. Brian milks with his wife and they were telling me how frustrating it was to try and find the infected quarter. I was slightly confused as if cows have clinical mastitis there are changes to the milk and the quarter may be swollen. Not so in this case. None of the cows were ill or off their feed.

On further questioning the mastitis was being picked up by the mastitis detectors. They stripped all cows at the start of milking and they were all clear. If they found clots or debris in the mastitis filter, they stripped the cow at the end of milking where the almost always found no changes to the milk. They carried out the CMT (Californian mastitis test) on some cows and identified quarters in this way, but often just treated all four quarters.

So let's examine what's going on. Mastitis means inflammation of the udder and so we should see either swollen quarters or changes to the milk. None of these were seen. None of the cows were ill, had temperatures or off their feed and so we can presume that these are healthy cows. The problem is due to what was found in the mastitis detector. It was presumed that any debris here is due to mastitis, but we need to remember that after calving there is often debris shed from the udder as a normal occurrence.

Brian argued by saying that many of these cows had high readings with the CMT. This would be correct, lots of cows will have high CMT scores post calving due to the effect of colostrum and any shed cells from the udder. Indeed, if you carry out a CMT on the entire herd you may find lots of cows with high counts, but if the herd cell count is OK and the cow has no clinical mastitis this is of little significance.

My advice was simple and clear-cut. Remove the mastitis detectors. They are hopeless for a variety of reasons. Firstly not all cases of mastitis results in clots, and so watery cases are missed. Secondly, the milk has gone into the bulk tank before the case is detected. Thirdly, the detectors interfere with milk flow and decrease vacuum stability at the teat end. They are an AID to detection, but nothing more. The only way to detect clinical mastitis is by stripping cows, which brings me to the next issue. Lots of farmers are treating healthy cows, while some are leaving cows with mastitis.

Over the past two years I have set a simple quiz for farmers relating to mastitis detection. I am amazed that lots of people do not get all questions correct. This is a reflection that lots of milkers have never had any training in mastitis control, and have just picked up information from whoever.

If you strip out a cow and she has clots in the foremilk, that may or may not be mastitis. Continue to strip out the cow and if the clots persist, this cows needs to be treated. If the clots disappear and they are just in the foremilk, this is a local reaction to infection which may have entered the teat canal between milkings.

John dreads going for his weekend off. He knows when he comes back on Monday; the boss will have treated several cows. The boss treats anything with a fleck. He maintains that this is mastitis. John know otherwise, as the cows which keep getting intermittent flecks are all low cell count cows and go not develop clinical mastitis. The boss is over treating these cows.

If the cow has watery milk, this will be mastitis and most likely will be due to coliform bacteria. I would treat these, as this is mastitis.

If the cow has a swollen quarter, is healthy and the milk appears normal, this is not mastitis. The swelling may be due to other factors. It may be that the cow is reacting to an infection and removing this herself. The action I would take with such a cow is to monitor progress. If the milk changes, of course treatment is recommended. If the milk is fine, leave her alone. Remember that the cow removes about 80% of all coliform infections herself and the mild swelling may be a sign that this reaction is taking place.

If all quarters are hard and swollen this may be an early sign or it could be that the cows has oedema or fluid retention. It's easy to detect oedema. Poke your finger into the udder and when you remove it, if there is a dimple remaining, this is due to oedema. If it springs out, that is inflammation.

There are many farmers who spend hours carrying out CMT tests to detect clinical quarters. You don't need to do this. If you can't see changes in the milk, there is no point treating the cow.

I have been running milker schools over lunchtimes for many of our client's milkers. You get the herdsmen into the practice for a couple of hours over lunch with some drinks and sandwiches and explain the theory about milking. You go through mastitis detection, teat preparation and the likes and they really respond to this well. For some, it is the first bit of training in their life!

Milking is a tough job. I aim to reduce tasks that are unnecessary and ensure that we milk the cows in the most efficient manner possible. Ensuring that we detect mastitis accurately and early pays real dividends.