

Curing mastitis – thinking beyond the tube

A change of tube can seem like the obvious solution when producers believe that mastitis cure rates are not up to scratch. But simply switching products is unlikely to be the answer to successfully tackling udder infection.

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There are several factors that producers should take into account if mastitis cure rates dip – it's not always about the tube. So says Boehringer Ingelheim Animal Health's vet Kath Aplin. "Working through a checklist of protocols with veterinary advice can significantly improve the efficacy of mastitis therapy, by identifying and addressing the cause of any problems. Simply switching tubes without doing this may not solve the problem."

Prevention is always the best way to tackle mastitis, but there will always be cases that require treatment – even on the best managed units. And there's a lot more to treatment than simply selecting a tube and administering it. "So where producers are not seeing the cure rates they expect, carry out a mastitis treatment review. The first important step is to establish exactly what is going on. A few difficult-to-treat cases may leave the producer feeling that they're not on top of mastitis. So it's vital to take a look at the bigger picture," says Mrs Aplin.

"Look at your herd data – specifically at the number of repeat cases and also SCC scores in the first three months after treatment. If high SCCs are pro-longed or you're seeing recurring cases, this could be indicative of an inadequate treatment protocol and warrants further investigation."

Mrs Aplin says that mastitis data must be accurately recorded and also easy to access: "Recording all cases of clinical mastitis via your milk recording organisation, such as NMR, makes analysis much easier and gives you

the bigger picture. It tells you what's going on and that's your starting point."

If cure rates are poor, the first question is often: 'should I change to a different tube?' "But the tube may not be the problem. How the tube is being used is often the real issue," says Mrs Aplin.

Early detection

Effective mastitis treatment begins with prompt and early detection. "The effort required will vary from herd to herd. If there's a significant problem with mastitis, time spent on early detection during milking – in other words looking for clots in the milk – will be a sound investment. "But in herds with a low incidence of mastitis, other areas of cow management may take priority. Decide which camp your herd falls into and, if necessary, spend more time on foremilk and early detection. Prompt treatment will help to improve cure rates," stresses Mrs Aplin.

The next area to check is tube insertion. "Review the protocols that are in place once you've detected a case of mastitis and decided to treat it."

She says that much is, rightly, made of good hygiene practices when administering dry-cow therapy, but less so when it comes to treating mastitis in milking cows. "So a renewed focus on hygiene might be needed. Clean the teats with surgical spirit and cotton wool, just as you would if administering dry-cow therapy. And make sure that hands and gloves are also clean. This reduces the risk of introducing new pathogens to the udder."

Mastitis treatment checklist

- Mastitis detection protocol
- Tube insertion protocol
- How often?
- NSAID use
- Injectable antibiotic use
- Treatment duration
- Which tube?





Mrs Aplin says that producers should also use the short 'less invasive' nozzle on the tube, if this is an option: "Again, this reduces the chance of introducing infection or damaging the keratin lining of the teat." How often the treatment should be administered will depend on the tube. Some will require twice-a-day treatment and others just once a day. "Using a tube that's licenced for once-a-day treatment potentially means that the cow is tubed fewer times. This should reduce the chance of introducing infection or of damaging the keratin lining of the teat, which could help to improve the cure rate, as well as saving time in the parlour." She added that some producers will go 'off label' with a once-a-day tube and administer it twice a day, after each milking. "I think they fear that milking the cow removes the antibiotic treatment from the udder. But a product that's licensed for use every 24 hours will disperse into the udder tissue and milking won't reduce its efficacy. It will persist in the udder."

NSAID protocol

Something else to consider as part of an effective mastitis treatment protocol is administering a NSAID. Mastitis is a painful condition, so there's also a welfare issue here – particularly in acute cases. And there's evidence to show that using an anti-inflammatory alongside antibiotic treatment can improve cure rates. "Research has also shown that using a NSAID such as Metacam, which is licensed for use alongside antibiotics, to treat cows who develop mastitis in early lactation can also have a positive effect in safeguarding fertility," says Mrs Aplin.

If a case of mastitis is particularly severe – perhaps it's been picked up late or the cow is showing other signs of systemic disease – then an injectable antibiotic may be recommended by the vet. "This is typically for cows that are 'poorly'. She may be off her feed and running a temperature. It can help her to recover from infection more quickly and successfully."

How long to treat cows for is up for debate. "Veterinary

advice is essential – not just for prescribing which treatments to use, but also for how long. The length of treatment – or number of tubes required – to cure a case of mastitis will vary from cow to cow and according to the pathogens involved. And this is where knowing the herd, the farm and the bacteria involved are key. Is the mastitis environmental or contagious?

Complete cure

"The latter usually requires more prolonged treatment for a complete cure. Other cases, particularly those caused by E coli, may require another treatment entirely. So always consult your vet and keep the pathology of your unit in mind," says Mrs Aplin. So, finally, we get to the tube itself. "Following the mastitis treatment plan will help vets and producers determine if they're using the best tube, in the best way, to cure their herd's mastitis.

"Changing to a different tube may be part of the solution – for example a change of tube may allow the optimal frequency and duration of treatment for the farm, without going 'off label'. But, invariably, reviewing the treatment protocols sheds light on areas where techniques and husbandry need to improve. This can often solve a problem and put cure rates back on track," she says.

"So next time you see a dip in cure rates, work closely with your vet and avoid switching to a different tube as a hasty reaction. More often than not it's the 'how' – not the 'what' – that offers the solution." |



Kath Aplin:

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