ENVIRONMENTAL MASTITIS: TREATMENT

Prevention is much better than cure, but even in the best herds some disease will occur. Clinical mastitis is best controlled by a combination of early antibiotic therapy and culling.

CURE AND RECURRENCE

- Chronic/recurrent infection has usually been associated with contagious organisms but recent evidence suggests it can occur with environmental infections.
- The recurrence can be due to persistence of the organism or to an increased susceptibility of quarters to new infection. Research is continuing into factors associated with possible cow susceptibility and adaptation of bacteria to the mammary environment.
- The cure rate during lactation can be very poor. Dry cow therapy is likely to be the most effective method. Early drying off with dry cow therapy is often the best treatment option.

ANTIBIOTIC THERAPY

- About 70% of coliform infections will self cure without antibiotics. This is increased to 90% with antibiotic therapy.
- The self-cure rate for Strep. uberis may only be 20%. With antibiotics it varies from 40 to 80%. Some cases are likely to recur / remain sub-clinical.
- It is not yet possible to identify which cases will self-cure without antibiotics.
- The standard course of antibiotics should be effective in most cases. For some infections extended or combination treatments (such as pulse treatment (repeated courses of antibiotics with short breaks between them) or intra-mammary plus injected antibiotics) may improve cure rate.
- Any off-label therapies require veterinary guidance and 7 days milk discard.
**WHICH ANTIBIOTIC**

- Coliforms have variable sensitivity to antibiotics due in part to the wide range of strains associated with mastitis.
- Antibiotics used against coliforms include aminoglycosides (streptomycin, neomycin and framycetin), tetracyclines, synthetic penicillins (ampicillin and amoxycillin) and cephalosporins.
- *Strep. uberis* is usually sensitive to most currently available mastitis tubes, including those containing only penicillins. With this organism it is very unlikely that treatment failure is due to the wrong choice of antibiotic.
- For all cases that fail to respond to your normal mastitis treatment, ask your veterinary surgeon for further advice.

**OTHER TREATMENTS**

**Fluid therapy and NSAIDs**

- For toxic mastitis, fluids and anti-inflammatory drugs (NSAIDs) are as important as antibiotics.

**Oxytocin**

- Oxytocin encourages milk let down and improves stripping of the infected quarter(s).

**Topical udder liniments**

- A wide range is available. There is no good evidence that any product has an effect other than that achieved by regular udder massage.

**CULLING GUIDE**

- Depends on herd mastitis incidence and history.
- Generally cull cows with more than 3 cases mastitis in same quarter in one lactation or more than 5 cases mastitis in one lactation.
- Recent MDC funded research at ADAS Bridgets illustrated that SCC in one lactation was not a reliable predictor of SCC in a subsequent lactation.
- Do not base culling decisions on previous lactation SCC.

**MORE INFORMATION**

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MAFF Publications - Action on animal health and welfare booklet.

The Livestock Knowledge Transfer management team are grateful to ADAS researchers and publications for the information used to develop this fact sheet.
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