

Summer Mastitis



British summer weather may be unpredictable but summer mastitis certainly isn't. It is a disease that changes little over the years, affecting the same farms year after year and often just certain fields within those holdings.

Very few mastitis affected quarters will recover, so any treatment is purely salvage and the main goal should be to avoid the disease, or at least minimise its incidence.

The basics are simple - it occurs in summer, it is spread by flies and it affects dry cows, heifers or young calves. It is an acute disease of the non-lactating mammary gland and is mainly caused by the bacterium *Trueperella pyogenes*. Other organisms can increase its severity and allow infection to establish more readily.

MAIN SIGNS

Farmers should look out for:

- An animal standing apart from the others, often lame, dull, anorexic and with a significantly raised temperature
- Teats become swollen and there are often large numbers of flies feeding around them
- Disease progresses until the whole udder is swollen, hard and producing foul-smelling, thick, yellow secretions, often tinged with blood. Left untreated, abortion or death can follow



- Outside the fly season and in milking cows, less typical cases will also occur. It is possible to find a heifer 'blind' in one quarter, having suffered no obvious disease. Efforts to open the teat canal will prove useless and it is highly likely that many of these cases will be due to summer mastitis

TREATMENT

Very few affected quarters will recover and treatment is aimed at saving the animal and recovering as much as possible. That means saving the animal's life, saving the pregnancy, producing a viable calf or at least a cow that can milk to some extent on the remaining quarters. Treatment involves antibiotics to combat infection and anti-inflammatories to counter the swelling and reduce temperature. Getting antibiotics to where they are needed is a challenge, as large amounts of pus and dead tissue are present, hence the importance of anti-inflammatory drugs.

Trueperella is sensitive to penicillin, but in some ways this is academic, as the antibiotic struggles to penetrate the damaged udder. Cases are best approached as if dealing with an abscess. It's essential that as much material as possible is removed by frequent stripping, but while the organism is common in the environment, stripping can be a source of further infection.



Strippings should be discarded safely and not on to the ground. Occasionally, the udder may completely slough off in a similar way to gangrenous mastitis. There may also be occasions where it is necessary to split the teat lengthways to drain the udder of infection or the teat may be removed completely.



PREVENTION

The keys to prevention are antibiotic cover, fly control, prevention of teat lesions, teat sealants and removal of susceptible animals from susceptible fields.

Antibiotic cover

- Intramammary dry cow antibiotics significantly help to reduce disease
- Dry cow antibiotics may not be active for sufficient time and repeat infusion may be needed after 3 to 4 weeks - even with long-acting preparations
- Repeating treatment may cause a serious problem if there is an insufficiently long dry period to be able to re-infuse after four weeks and still calve outside the withdrawal period. In this instance shorter acting formulations should be considered
- Beware, good aseptic technique is essential when re-infusing dry cow tubes, otherwise a severe mastitis incident can occur. If considering repeat infusion please consult your vet.
- In high risk areas consideration can be given to antibiotic tubing of heifers - seek veterinary advice prior to performing this

Fly control

The sheep head fly, *Hydrotoea irritans* also carries the bacteria causing summer mastitis, but it is probably only a secondary factor after something else has started the outbreak e.g. an animal with an infected teat sore. This fly's eggs over-winter in sandy soils and emerge in June or July. There is only one generation of adult flies active in July, August and September. High winds and heavy rains inhibit fly activity.

Controlling flies on cattle is best done using pour-ons or impregnated fly tags. Unfortunately these give little protection to the udder area and it is worth giving a half dose of a liquid product spread with a gloved hand over the whole udder surface.

To minimise risks, it is important to:

- Identify and isolate cases early
- Watch out for teat lesions
- Control flies on cattle (especially around teats)
- Avoid areas with large fly populations. Where possible, avoid pastures with sandy soils, tree cover and water

Teat skin lesions

- It is important to check teats regularly
- Good teat condition will reduce or eliminate infection particularly as the initial source of summer mastitis is usually by infection tracking into the teat-end from a sore harbouring the organism
- Ensure any affected animals are treated and preferably kept away from the rest of the herd
- Additional fly protection can also be given to these animals

Teat seals

- **Stockholm tar** used to be popular, but its messy to apply and needs repeating regularly. **Taping** teats is laborious and difficult to do properly. The new **silicone** teat sealants have revolutionised this form of management as they are easy to apply and last for the whole dry period.



A swollen teat and quarter with summer mastitis



Infected udders can burst and discharge



The sheep head fly, *Hydrotoea irritans*

FINAL WORD

If, after all these control measures have been applied and evaluated and there is no improvement, try calving during a low risk period e.g. earlier in the summer.

Summer mastitis will continue to be a problem on certain farms for years to come, but although control measures can be expensive on time and materials, the savings are well worthwhile.

For further information contact your local XLVets practice:

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