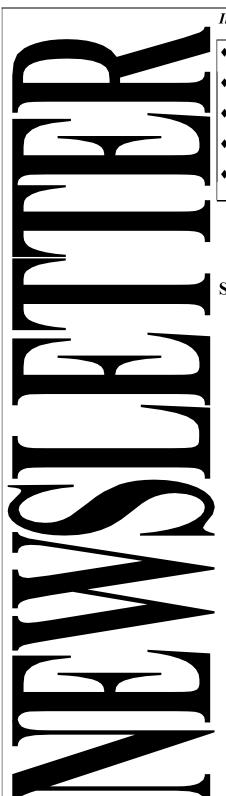
Rochester Veterinary Practice



2020



In this issue:

- Seasonal reminders
- ♦ Covid 19
- ♦ Mastitis culturing at RVP
- **♦** Mastitis treatment
- ♦ Mastitis and "failure to cure"

Seasonal reminders:

- Do not let cattle graze country with significant amounts of heliotrope.
 Heliotrope damages the liver and cattle are affected months and even years later.
- Watch out for red-rooted amaranthus. There is plenty of this weed around after the rain. Young stock can eat too much amaranthus. It contains a kidney toxin and can be fatal.



Covid 19

Like everybody else we are changing the way we do business to try and reduce the chance of transmitting Covid 19.

Our goals are to reduce transmission of virus between: -

- our staff and clients
- clients and our staff
- between staff

Vets have been deemed an essential service and at this stage we are attempting to provide service to all our cattle clients while winding back our small animal operation to urgent matters only.

Drug supply

We would appreciate it if you ring up first with drug orders. This will reduce the waiting time around the front counter.

If anybody would like their drugs delivered ring us up and, in most instances, we will be going past in the next day or two and can drop it off

On farm

It is difficult to keep humans 2 meters apart during many of our jobs but usually with a bit of planning we can reduce the risk.

We are encouraging our vets to speak up if they think there is a safer way of performing a procedure. Please don't be offended if they ask you to move back or to not touch something.

All our staff have been told to stay at home if they are feeling sick.

Normally we appreciate help cleaning up our gear afterwards but right now it is probably better to let us clean and cart our own gear back to the car.

Rochester Veterinary Practice



2020

Mastitis Culturing at RVP

Normally we send mastitis samples to be cultured at an external laboratory where the turnaround time is generally 72hours or longer. Lately we have been offering inhouse mastitis culturing. We can provide results in approximately 24 hours most of the time.

Recent research has shown that delaying treatment of cows with mild to moderate mastitis does not affect the outcome for that cow. Cows that are obviously unwell with mastitis should be treated immediately.

Milk samples from cows with mastitis need to be collected in a sterile manner to reduce the risk of contamination. They should be refrigerated or frozen if there is a delay between sampling the cow and dropping it off at the practice.

Between 10-40% of samples will have no growth. No growth results may be due to there being no bacteria present, not enough bacteria present to allow growth on culture plates or if there are antibiotics present in the milk sample.

Mastitis cultures carried out at the practice provide a result much sooner and so enable you to give the most appropriate treatment. It may also reduce the amount of antibiotics as some cases do not require treatment. Cows that are not sick and culture E. coli do not have better outcomes if they are treated with antibiotics.

We are unable to provide sensitivities to common antibiotics used to treat mastitis. If you require antibiotic sensitivities, we can send the sample to an external laboratory.

Mastitis treatment

The average cost of one clinical mastitis cow is \$277 and 1 in 5 cows with mastitis end up being culled from the herd. The best chance to cure a clinical mastitis is with the first treatment (75% cure rate).

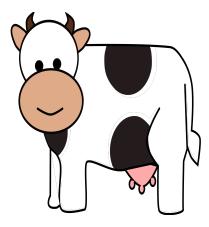
Treatment protocols should be put in place on farm so all farm staff can recognise mastitis cows and how to treat them. For example –

Mild mastitis (only changes in milk such as clots/watery). Intramammary tubes and anti-inflammatory.

Moderate mastitis (milk changes + moderate swelling, heat and painful udder). Intramammary tubes, injectable treatment and anti-inflammatory.

Severe mastitis (obviously sick cow) Intramammary tubes, injectable treatment, anti-inflammatory plus supportive treatments (veterinary attention may be needed).

Mastitis samples should be collected in a sterile manner, labelled with cow id, quarter affected and date, and stored in the freezer if not being cultured immediately. The class of antibiotics used will depend on previous farm experiences, previous mastitis culture results and preference for route of administration.



Mastitis and "failure to cure"

Mastitis cases that do not cure with treatment are very frustrating but common. Not all cases will be cured with treatment. The reported cure rates for the common mastitis pathogens are:

- Strep uberis = 82-91% cure
- Staph aureus = 20-60%
- Strep dysgalactiae = 90-98% cure rate
- Strep agalactiae = nearly 100% cure rate
- E. coli = High rate of spontaneous cure (generally not treated if cow is not sick)

There are numerous reasons for failure to cure. Using the wrong antibiotic is usually the least likely reason but we do occasionally see mastitis bugs which are resistant to some of the common antibiotics.

Older cows, cows in late lactation, cows with multiple infected quarters and cows with chronic long-term high cell counts are all harder to cure.

Other factors that reduce the chance of a cure are if cows are not milked out properly or if teats are contaminated during treatment with tubes and new bugs are introduced. The use of drugs that are out of date or that have not been stored correctly or where label directions are not followed may also lead to reduced cure rates.

As there are many reasons for treatment failure, we should try and maximise the likelihood of cure at first treatment. This can be done by knowing what mastitis pathogen we are dealing with, selecting appropriate cows to treat and using appropriate antibiotic and supportive treatments.