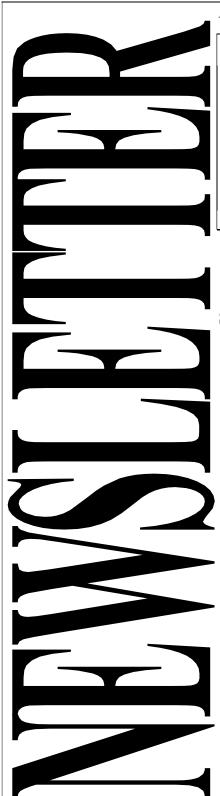
### **Rochester Veterinary Practice**



#### March 2020



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#### 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 heat stress in early autumn calving cows. Cows with milk fever are not able to regulate their temperature and will overheat on a hot day. Throw buckets of water on these cows to help them cool down.



 Calves born in hot weather are especially susceptible to dehydration. Sick or scouring calves need extra attention in hot weather.

#### Hardware disease

This season we have seen several "mini outbreaks" of hardware disease which is technically known as traumatic reticuloperitonitis. The most common cause of hardware disease is a piece of wire between 5 and 8 cm long.

We think the main reason for the increase in cases is because feed has been sourced from unusual suppliers. There is more likely to be pieces of metal from old fences in crops that have failed or on land that was fenced off for grazing and then converted to hay.



The other risk factor is using a mixer wagon without a magnet. Longer pieces of wire are chopped up to a more dangerous length.

When a cow eats a piece of wire most of them sit in the rumen and don't cause any trouble, but a percentage manage to poke through. This usually happens in the reticulum which has a honeycomb shaped lining. One end of the wire gets caught in a honeycomb cell and when the reticulum contracts the other end is pushed through into the abdomen.

Once stomach contents leak out into the abdomen the cow will develop peritonitis which is an infection of the abdomen. Sometimes this infection is walled off and localised and sometimes it spreads throughout the whole abdomen.

Cows with early stage hardware disease often show fairly vague symptoms. They are off their milk and not eating, may have a slight fever are reluctant to move and may have an arched back.

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Many cows improve after a course of antibiotics if they can wall off the infection but other cows with a more widespread infection get slowly worse and lie down and die. Another group of cows get over the infection but develop vagal indigestion. These cows end up with a big bloated rumen that does not contract normally.

## Prevention of hardware disease

It seems logical to treat cows affected with hardware disease with a magnet that sits inside the rumen. There is some evidence that these do help a percentage of cows to pull the wire back into the rumen which helps them to get better.

Another option is to put a magnet into every cow, but this would be an expensive and very difficult job.

During seasons where feed is scarce it is difficult to knock back hay that is from a dubious source. If you are worried that there might be wire in hay it is likely to be safer to feed the hay in a rack rather than through a mixer wagon.



# Managing calves after difficult calvings

Traditionally after we had pulled a calf, we would hang the calf up by its back legs as it was thought this would help remove fluid from the calf's lungs. We now know that most of the fluid that comes out of the mouth shortly after birth comes from

the stomach and does not need to be removed.

If a calf is hung up by its back legs the contents of the abdomen are pressing on the calf's diaphragm making it more difficult to breathe.

So, save your back and do not lift calves up and over the fence railings. Simply sit the calf up on its chest and rub the ribs with a towel or a handful of hay. Sometimes it is useful to clear fluid from the mouth and nose with a towel. A stalk of hay or a small stick up the nostril can also help to stimulate breathing.



## Antibiotic residues in milk

We would like to know when antibiotics are detected in milk that is delivered to the factory. Sometimes the cause is obvious – someone has stuffed up and normal procedures were not followed.

For the last several years when bobby calves have tested positive for antibiotics it has been mandatory for the vet that has dispensed the antibiotic to thoroughly investigate the case. We have been able to determine what went wrong and help people put in place protocols that minimise the chance of an antibiotic residue occurring again.

This system has been very successful in reducing the number of antibiotic residues in bobby calves.

It is not mandatory for the dispensing vet to be involved in antibiotic violations involving milk. Processors tell us that they encourage suppliers to contact their vet, but it seems that this only happens some of the time.

A common cause of antibiotic residues in milk is when cows calve earlier than expected. This can be due to natural variation, twins, misleading preg test results or poor joining records.

When cows calve earlier than expected it is important to keep cows out of the vat for the prescribed time. For Cepravin DC the minimum dry period is 49 days and then cows must be kept out of the vat for 4 days after they calve. This means that the total period of time that needs to elapse after Cepravin DC is used is 49 + 4 =53 days.

For Juraclox DC the minimum dry period is 35 days so the total period out of the vat is 35 + 4 = 39 days.

Because Cepravin DC has a longer minimum dry period it is essential that you have accurate calving dates if you plan to use this product.

The best way to get accurate calving dates is to preg test cows with an ultrasound when they are less than 16 weeks pregnant.

There have been occasions when there has been no obvious reason for the antibiotic violation. We are particularly keen to investigate these cases.