

Hardware disease (Vagal indigestion)

Some season we see several “mini outbreaks” of hardware disease which is technically known as traumatic reticuloperitonitis (TRP). 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 there reticulum (stomach 1) 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 (peritonitis). 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.

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.



In severe cases the wire migrates to the heart and causes an infection around the heart. These animals inevitably die or have to be euthanised.

Prevention of hardware disease

It seems logical to treat cows affected with hardware disease with a magnet that sits inside the reticulum. There is some evidence that these do help a percentage (45%) 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. If possible, putting magnets on feed out wagons can collect wire in the feed source.