Traumatic Reticulitis (wire)

Though far less common than it used to be 30 years ago, NADIS data shows that Traumatic Reticulitis has increased in recent years and is a significant cause of ill-thrift and culling on many farms.

What is traumatic reticulitis

Traumatic reticulitis is primarily a disease of adult cattle. It occurs when pieces of wire, or other sharp metal objects, which have been eaten by the cow along with its food penetrate the reticulum wall (as a result of the contractions during the cudding process). Infection spreads along the wire to the surrounding abdomen, producing an abscess and adhesions. In some cases the wire will penetrate into the chest of the animal causing abscess in the chest, and in severe cases infection of the outside of the heart (pericarditis).

In the UK the most common cause of traumatic reticulitis is tyre wire, coming from old tyres used on silage clamps.

Clinical Signs

♦ Traumatic reticulitis is a progressive disease with the signs changing as the infected abscessed area spreads

♦ Reduction in feed intake

♦ Reduced milk yield

♦ Abdominal pain, reluctant to move, often grunts when made to move

♦ Stands with arched back and tense abdominal wall

♦ Initially temperature will be raised, but as progresses this can fall to normal

♦ Rumen movements reduced and weak
Diagnosis

- On clinical signs, but these are often very vague
- Blood tests may show increased white blood cells, a secondary ketosis
- Exploratory rumenotomy can be used to locate wire
- Animals will grunt when withers firmly pressed down
- Pericarditis identified by muffled heart sounds accompanied by splashing
- For many cows in chronic phase the only diagnosis possible is a non-specific indigestion, because the signs of traumatic reticulitis are limited

Treatment

- Surgical treatment (rumenotomy and removal of wire) can be useful in early cases if spread is not too great
- Conservative treatment (antibiotics, anti-inflammatories and a rumen magnet) can also be effective in mild cases.
- Severely affected cases, particularly those with pericarditis, should be humanely slaughtered as soon as possible as treatment will almost certainly be ineffective
- Injections of anti-inflammatories significantly improve cow well-being and help to restore the cow to normal production more quickly

Prevention

1) Removing the source of wire is the best method of prevention. Old tyres with wires that show any evidence of wear must be thrown away and not used on silage clamps
2) Magnets can significantly reduce the incidence of clinical disease.

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*NADIS (National Animal Disease Information Service) is a network of 40 veterinary practices and 6 veterinary colleges monitoring diseases in cattle, sheep and pigs in the UK.*