

The Down Cow – improving the chances of recovery
Lungworm vaccination reminder
Rotavec® Corona vaccine

The Down Cow

The definition of a 'down' cow varies but perhaps the simplest one is "a cow that is recumbent (lying down) and unable to stand". The 'downer' cow is a cow that is recumbent for more than 24 hours, often remaining bright and alert but being unable to stand due to secondary damage from prolonged recumbency.

There are many causes of prolonged recumbency which can be broadly categorised into one of four groups:

1. **Metabolic:** milk fever, hypomag (staggers), protein-energy deficiency.
2. **Musculo-skeletal:** calving paralysis, nerve damage (front or hind limb), hip dislocation, pelvic or leg fracture, back injury.
3. **Acute systemic illness:** toxic mastitis, grain overload, salmonellosis.
4. **Miscellaneous:** dystocia, nitrate poisoning, being cast.

Recovery from being a down cow rather than progressing to a downer cow is dependent on a number of factors. A study in Australia looked at the clinically important secondary damage that contributed to recumbency for periods over 24 hours. This is damage that either contributed to the initial recumbency or delayed or prevented recovery from the original recumbency – predominantly various types of musculo-skeletal issues or clinical diseases.

Some of their results are summarised here:

- 16% had no observed secondary damage.
- 79% had secondary damage.
- 46% had more than one type of secondary damage.

The likelihood of a cow recovering from recumbency when there was no evidence of secondary damage was found to be nearly eight times greater than cows with observed secondary damage. Of the 149 cows

that did not recover, 23 did not recover from the initial cause, 107 died as a result of secondary damage and 19 failed to recover due to a combination of primary and secondary causes.

The study then went on to look at factors that may have contributed to the recovery of a down cow. Prompt and appropriate diagnosis and treatment of the primary cause was an obvious factor. Lifting the cow to enable full clinical examination is important as many of the nerve injuries cannot be determined in the recumbent cow. Full clinical examination should give an indication of whether a down cow is likely to recover or not and whether the appropriate treatment would be euthanasia.

Following treatment of the primary cause of recumbency, the biggest factor in the likelihood of recovery was in the quality of the nursing care. The components of this can be broadly summarised as:

- confinement in a small, sheltered shed.
- soft, deep, hygienic bedding:
 - 40-50cm of hay or straw or
 - 20-30cm of sawdust, sand or equivalent
- well-fed and watered.
- rolled regularly if unable to swap sides themselves.
- lifted at least twice daily if they can stand effectively once lifted and under supervision.

Many of the common secondary conditions are a result of cows:

- sitting on hard surfaces without being rolled causing pressure damage to the nerves and muscles of the back and hind limbs.
- crawling resulting in femoral nerve damage.

- being left in lateral recumbency resulting in fore limb damage, aspiration pneumonia or choke.
- exposure to unfavourable weather conditions that can result in pneumonia, chilling or heat stroke.
- poor udder care leading to mastitis
- general lack of care.

Lungworm

Lungworm (husk) is a serious disease of cattle and can result in death or premature culling of individuals. Recently, lungworm outbreaks have started to rise due to a combination of:

- increased reliance on long-acting wormers in calves *and*
- changes in the UK weather patterns.

Reports show an increase in the numbers of husk cases in 2nd year grazing animals and adult cattle.

Forgetting about husk when planning your herd management comes at a cost. The total cost of a moderate outbreak of Husk in a 100 cow herd was over £15,000. The most effective way of controlling husk is to vaccinate with Bovilis® Huskvac. Whilst protecting the calf from clinical disease the vaccine also allows the development of natural immunity which should protect the animal from husk in future grazing seasons.



Planning for vaccination needs to start now. The product is licensed for all cattle over 8 weeks with two doses given four weeks apart. The second dose needs to be given at least two weeks before turnout to provide maximum protection.

Rotavec® Corona

Calf scour often peaks at this time of year with the increased pressure on calf housing whilst waiting for spring turnout. Hygiene and good colostrum management are key factors in the prevention of scour and this can be further enhanced by the use of Rotavec® Corona. Cows are given a single dose of the vaccine between 12 and 3 weeks before calving. This produces high levels of antibody against the most common causes of calf scour – Rotavirus, Coronavirus and *E coli* K99. Feeding at least 3 litres of the antibody-enriched colostrum to calves in the first six hours of life gives added protection against scour during the highest risk period.

Using data from ADAS, the cost of a scour outbreak in a 100-cow suckler herd is estimated at £5794. Preventing the scour outbreak by the pre-calving vaccination of the cows with Rotavec® Corona would give a potential cost saving of over £4000.

Please speak to one of our vets if you would like to discuss the benefits of either of these vaccines further or call the Dispensary to order.

Best wishes

Cathy



Cathy Morris BVSc BSc MRCVS

Are you looking for someone to rear your heifers? We have a client with facilities to rear up to 150 heifers – housed or grazed – from this spring. If you think this might be a service of interest to you, please contact the Office and we will pass your details on.

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