

Acute vitamin B1 deficiency spotted in cows

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A recent weekend call presented me with some interesting and unusual cases. The weather had just improved, grass growth was good and ground was drying. Cows had just been let off grazing after a hard winter of poor foddering. I was called out early to a cow "acting strange".

As I examined her, she was showing signs of colic, diarrhoea and she was notably blind. The presentation and history led me to believe that she had a condition called Cerebrocortical Necrosis (CCN). I

gave her some treatment, the most important component of which was vitamin B1 injections.

Later in the day, the same farmer had two more cows presenting similarly. The initial patient was responding well and was regaining her sight, so the two further cases were treated the same. At this stage, the farmer had also put out some hay to the grazing cows as a source of roughage.

CCN is a nervous condition which is triggered by a dietary change. I found it unusual in cows, because we see it more commonly in calves that are

out grazing for the first time. In this case, the cows went from poor fodder to lush grass, while in the case of calves they often go from milk and concentrates to grass.

The brain relies on a steady supply of vitamin B1 to function correctly. Under normal circumstances, this is made in the stomach/rumen.

However, when the diet is changed and a bout of acidosis ensues, the animal becomes deficient in vitamin B1 and acts neurologically – most notably blind. Diarrhoea and colic might also be a feature. Most animals recover well from

the condition if treated early enough.

It is important that any dietary change is done gradually to prevent CCN and other conditions. This could involve strip grazing and providing hay or straw as a source of roughage.

Care should also be taken when weaning bucket-reared calves and changing them to new pasture. It is important that they have a functional rumen, ready to digest grass prior to weaning and turn-out.

Far too many calves suffer conditions such as CCN, diarrhoea and ill thrift, which can all be linked to poor rumen de-

velopment. Calves need to be consistently eating sufficient concentrates, straw and drinking water before being able to graze.

For further advice on this and other topics, contact your local vet.

Eoin Daly works at Mulcair Vet Clinic, Newport, Co Tipperary. Mulcair Vet Clinic is part of XLVets. XLVets is a group of progressive practices who are working together to achieve a better future for agriculture and veterinary in Ireland. For further information, go to www.xlvets.ie.