

X-Zelit Performance in a Swedish Farm, Duvereds Lantbruk

Introduction and method

A number of small-scale experiments were conducted at Duvereds Lantbruk over the spring and summer involving the drug X-Zelit and its effect on the incidence of parturient paresis (milk fever).

X-Zelit was administered to a total of 21 cows 10 to 20 days before calving, and the results were subsequently compared to the 21 cows which have calved before this period and which had thus not been given X-Zelit. The study did not include cows calving for the first time.

Results

From 9 April 2009 to 8 June 2009, i.e. before X-Zelit was admixed into the feed, veterinary examination reports show that a total of 5 cows had been treated for paresis and that a veterinary surgeon had been summoned a total of 9 times .

In the period after X-Zelit was administered, i.e. from 8 June 2009 to 8 August 2009, the only cow treated was no. SE 03455 0317 in one instance, on 8 June 2009. See comments to the table on the right.

Time spent on parturient paresis

According to the livestock owners, it takes up to 2 hours a day to care for a recumbent cow. The owners have a loading machine which makes it possible for them to lift the cow at regular intervals, but they assess that this process would take longer if they had to turn over the cow manually. These 2 hours include feeding, caring for the cow and time spent on veterinary visits.

The results are compiled in the table on the right.



Period	Number of calvings	Number of cases of parturient paresis	Number of treatments of parturient paresis	Remaining afterbirth	Other disease possibly related to hypocalcaemia (calcium deficiency)
Preliminary period (9 April 2009 – 8 June 2009)	21	5	9	0	0
X-Zelit period (8 June 2009 – 8 August 2009)	21	1*	1?	3***	1****

* This was a sixth calver (cow no. SE 03455 0317) which seemed paralysed after calving but which also had displacement of the abomasum with diarrhoea up to the calving. She improved afterwards.

*** Includes 2 cows with which gave birth to twins and which, due to the slightly shorter gestation period, had only been given food containing X-Zelit for 5 and 8 days respectively.

**** A cow suspected of rupturing. The cow got better.

Discussion

The incidence of parturient paresis clearly declines after cows receive X-Zelit.

The diagnosis “parturient paresis” was only made for clinical finds and was not verified by blood samples. For this reason the diagnosis is not definitive.

During the course of the study, a number of cows were treated with calcium boluses for preventative purposes. It was not completely specified which cows were treated in this manner, but they received “equal treatment” both before and after X-Zelit was admixed into the feed.

During the course of winter and spring, the farm had problems with difficult cases of parturient paresis. These incidents started to recede as spring approached and the cows were released into the fields. For this reason, livestock owners do not completely dismiss the effect of the grazing season’s effect on reducing parturient paresis but they would like to continue through the winter to see the results.

As the drug does not taste good, it is admixed in the feed to be consumed. If the cows still refuse to eat this, it helps to admix the drug in two smaller portions, diluted in additional feed to make the mixture more appetising.