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The use of *Arsenicum album* 30c to complement conventional treatment of neonatal diarrhoea ('scours') in calves

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Abstract

In a pilot double blind study carried out in Scotland, the effect of supplementing a conventional treatment plan with homeopathic *Arsenicum album* was studied. In the management of neonatal calf scour it appeared that more animals recovered after one day in the group that had received active medicine, than in the placebo group. These results are encouraging.

KEYWORDS: Scours; *Arsenicum album*; Calves; Diarrhoea, neonatal; Veterinary medicine

Introduction

Neonatal scouring (diarrhoea) in calves is a serious problem in both dairy and beef herds, with mortality varying from 0 to 80%. In non fatal cases the resultant poor thriftiness and veterinary bills can cause significant financial loss to the farmer. In calves of 1-3 days, certain strains of *Escherichia coli* containing the antigenic protein K99 are the usual aetiological agents, while rotavirus and coronavirus are responsible in those from 5-15 days. *Salmonella*, *pseudomonas*, *proteus* and yeasts have also been implicated. The disease may be caused by a number of factors including inadequate transfer of colostral immunoglobulins, stress and poor management.

The main symptoms are diarrhoea, dehydration and general weakness. Onset is sudden, the faeces are profuse, pasty or watery and the animal may collapse within 12 to 24 hours. There is damage to the mucosa of the small intestine. Normal conventional treatment may involve one or more therapies. Antiserum, oral or intravenous antibiotics, fluid therapy, antidiarrhoeals are all available and together with management factors often

secure improvement within 48 hours.

The complex nature of neonatal scouring means that total prevention is unrealistic and the farmer must look to economical ways of limiting the disease. One method of achieving this would be to speed up the time of recovery.

Aim of trial

The aim of this double blind trial was to combine a course of homeopathic *Arsenicum album* with the treatment conventionally prescribed by a veterinary surgeon, in order to see if a quicker recovery could be promoted.

Homeopathic treatment of scouring

The drug picture of *Arsenicum album* includes inflammation of the lower bowel, producing straining and tenesmus with dysenteric stools of 'cadaverous' odour and matches the symptoms of calf scour well. It is a popular homeopathic medicine in the treatment of diarrhoea in pets.¹

Several other homeopathic medicines have been suggested for calf scour.² *E. coli* 'nosode' is often prescribed, being especially effective when this organism is the causative factor. In this trial only *Arsenicum album* was used.

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Homoeopathic Trial	
Farm Name:	
Calf Number:	<input type="text"/>
Calf Age:	0-7 days <input type="text"/> 7-14 days <input type="text"/>
Condition:	Subdued -> Bright (score 1-5) <input type="text"/>
	Standing <input type="text"/> Recumbent <input type="text"/>
Scour type:	Watery <input type="text"/> Pasty <input type="text"/> Bloody <input type="text"/>
Treatment:	
Antiserum	<input type="text"/>
Antibiotic: ORAL	<input type="text"/>
Antibiotic: IV	<input type="text"/>
Fluid Therapy	<input type="text"/>
Homoeopathic	<input type="text"/> Vial No. <input type="text"/>
Sample Taken:	Yes <input type="text"/> No <input type="text"/>
Lab Result	
Vet:	
Date:	
THANKYOU FOR YOUR HELP	

FIGURE 1. Veterinary surgeon's recording form

Method

The initial target was to treat 20 animals divided equally into control and test groups at random. 6 glass vials, each containing 3 ml (1 dose) of liquid were packed in boxes arranged in two batches of 10. In each batch there were 5 boxes containing *Arsenicum album* 30c and 5 placebos containing only vehicle potentized to 30c. Any effect due to the vehicle alone could therefore be discounted as it was the same in both sets of vials. The boxes and vials were numbered, the key being held by the dispenser.

The animal was assessed by the veterinary surgeon according to a number of criteria (Figure 1), and a treatment plan made. The score for 'brightness' was purely subjective, to give some idea of the severity of the disease. Following administration of the conventional treatments, a box of vials was taken from one of the batches of 10, the code number recorded, and the animal given one dose orally. The farmer was instructed to give the

Condition	Number of animals					
	Start		Day 1		Day 2	
	n	%	n	%	n	%
Recumbent	4	40	2	20	0	0
Scours						
pasty	3	30	6	60	8	80
bloody	1	10	*		*	
watery	6	60	3	30	1	10
Totals	10		9		9	

TABLE 1. Placebo. Average degree of 'brightness' at start = 3. * Animal died on first day

Condition	Number of animals					
	Start		Day 1		Day 2	
	n	%	n	%	n	%
Recumbent	1	17	1	17	0	0
Scours						
pasty	2	23	5	83	5	83
bloody	1	17	0		0	
watery	3	50	1	17	1	17
Totals	6		6		6	

TABLE 2. Active. Average degree of 'brightness' at start = 2

remaining 5 doses over the next two days at 6 hour intervals and to record progress.

The number of animals with bloody, watery and pasty scour were counted.

Results and discussion

16 animals were tested of which 1, in the group receiving placebo, died. The incidence of scouring this season was low due to the unusually dry weather. The average 'brightness' score for the placebo group before treatment was 3, and for the active ingredient group 2 (1 low, 5 high). Thus, on average the placebo group were marginally 'brighter' than the test group.

Tables 1 and 2 show the incidence of the

FIGURE 2. Percentage of animals recovered at 0-48 hours. *Arsenicum album* 30c (n=6) v placebo (n=9).

different types of scour. The percentage of animals with pasty scour in the placebo and test groups over the two days of the trial has been plotted in Figure 2. A change from watery to pasty scour was interpreted as an improvement in the condition. It appears from Figure 2 that most of the animals that were given the homoeopathic medicine in addition to their conventional treatment seemed to recover after 1 day, while in the placebo group it took 2 days. The results are encouraging, and a more comprehensive trial is planned next winter.

References

- 1 Kayne SB. Homoeopathic veterinary prescribing. *Br Hom J* 1992; 81: 25-8.
- 2 MacLeod G. *The Treatment of Cattle by Homoeopathy*. Saffron Walden: Health Science Press 1981.

Acknowledgement

The homoeopathic medicines were supplied by Freeman's, Glasgow.

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