

COMPARISON OF HOMOEOPATHIC AND ANTIBIOTIC TREATMENT OF CLINICAL MASTITIS

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SUMMARY

Eighty dairy cows with clinical mastitis received either antibiotic or homoeopathic treatment in a blind, randomised study. There was no significant difference between the two treatments in clinical cure after 14 milkings, but homoeopathy was significantly less likely to achieve a bacteriological cure compared to antibiotics. At a follow-up examination one week later, cure rates were similar. Subsequent udder health and milk quality were not affected by treatment.

INTRODUCTION

Organic herds are strongly encouraged to use so-called alternative medicines, and homoeopathy is one of the main therapies being used. Currently, there is little information on the effect and efficacy of homoeopathy. Reviews of human and veterinary studies suggest that there is a positive effect, but too little evidence for definite conclusions (Scofield, 1984; Kleijnen et al., 1991; Hamann, 1992; Linde et al., 1997). Treatment with unproven therapies has potential welfare implications and economic consequences.

MATERIALS & METHODS

Cows with clinical mastitis, but without signs of systemic illness, were selected from a 165-cow herd with a history of environmental mastitis. Homoeopathic remedies were administered as intra-nasal spray (dilution and dose calculated to give five drops of remedy) at milking time. Cows received the combination remedy BBU 30c (belladonna, bryonia, urtica urens) during the acute phase (usually once only), followed by phytolacca 10M at the next three milkings. The control group was treated with intra-muscular ampicillin for three days. All cows were milked twice daily, with no additional stripping.

Clinical cure was defined as physically normal milk and a normal mammary gland, and bacteriological cure as the absence of any growth of the pathogen isolated from the pre-treatment sample.

RESULTS

Cure rates achieved by the two treatments are shown in the table below. The odds ratio for homoeopathy to achieve a cure was 0.43 (95% CI 0.17- 1.1) for clinical cure, and 0.33 (95% CI 0.12-0.9) for bacteriological cure.

	Time	Homoeopathy	Antibiosis	p Value*
Clinical cure (%)	14 th milking	48	68	> 0.07
	28 th milking	56	69	> 0.3
Bacteriological cure (%)	14 th milking	50	75	< 0.03
	28 th milking	65	74	> 0.5

*Chi-Square

For pathogens other than *Streptococcus uberis*, the two treatments showed no significant difference in cure rates. For *S. uberis*, cure rates were significantly lower in the homoeopathy group.

No deterioration was evident in cows treated with homoeopathy based on clinical examination. There was no difference between the two groups in quarter recurrence rate, or number of cows with SCC exceeding 200,000 cells/ml at the next herd test.

DISCUSSION

The study deviates from classical homoeopathy by applying a standardised treatment regime based on proven indications. This closely reflects the approach to homoeopathy by an inexperienced person. The remedies used have been advocated as useful treatments for mastitis in literature available to farmers. No conclusions can, or should, be drawn on the efficacy of classic homoeopathy based on the simile principle.

Without a negative or placebo group, it is not possible to assess the contribution of selfcure to the observed cure rates. Reported selfcure rates vary widely from marked deterioration to rates above those achieved by either homoeopathy or antibiotics in this study.

Clinical observations did not give rise to welfare concerns for cows treated with homoeopathy in this study.

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