

Control of Extensive Chorioptic Mange in Confined Dairy Cattle

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Introduction

Chorioptic mange causes unsightly scabs with pruritus at the base of the tail of confined dairy cattle. Recommended treatment requires drugs with impractical milk withdrawals, and thus mange is a problem in US dairies. The objective of this study was to evaluate the effect of a one-time whole-herd treatment with an approved product for use in lactating dairy cattle.

Materials and Methods

This study was performed on a 1,200-milking cow dairy in Oregon. All cows and heifers were scored prior to treatment and then 1, 3, 7, and 12 months after treatment. A simple scoring system was established: 0-no lesions, 1-aloppecia/dull hair, 2-crust (any amount). Treatment consisted of a single pour-on application of 35 mL of eprinomectin 0.5% solution (Eprinex Pour-On, Merial). A standard Z-test was used to compare proportions of cows with lesions between scoring occasions. Risk factors for presence of mange lesions were evaluated by logistic regression.

Results

Pre-treatment, 50.7% of cows had mange lesions (12.7% crusty lesions). Maximum healing was at seven months post-treatment (13.5%, $P<0.001$), but lesions increased again 12 months post-treatment (21.3%, $P<0.001$). Adult cows, late lactation cows, and shorter interval between treatment and scoring increased the risk of mange lesions. No effect was observed on milk production.

Significance

Our findings show that a one-time whole-herd treatment may control chorioptic mange. However, eradication will require more treatments. Because prevalence of lesions was lowest at seven months post-treatment, twice yearly application may be an appropriate treatment to achieve eradication.