

Survey of Veterinarians and Hoof Trimmers on Methods Applied to Treat Claw Lesions in Dairy Cattle

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Summary and Implications

A survey inquiring about treatment approaches for claw horn lesion in dairy cattle was available to veterinarians and hoof trimmers who were members of either the American Association of Bovine Practitioners (AABP) or the Hoof Trimmers Association (HTA) during the winter of 2013. The study showed differences among AABP and HTA members with regards to procedural training and technique as well as treatment approach. No differences were noted when evaluating the use of topical medications along with bandaging materials, but details regarding the types of topical medications used did reveal discrepancies among the AABP and HTA members.

Introduction

Lameness in dairy cattle is a major welfare issue and contributes to reduced milk yield, decreased reproductive performance, premature culling, and increased costs associated with treatment of lame animals. Claw horn lesions such as sole ulcers, white line disease and traumatic lesions of the sole (sole punctures, foreign bodies, etc.) are commonly associated with lameness.

Scientific literature contains little information regarding specific treatment protocols for these types of lesions. The most commonly reported treatment for sole ulcers and white line disease include therapeutic trimming, with or without the application of a hoof block. The use of systemic antibiotics and analgesics is primarily producer dependent. Current literature does not contain information regarding the most frequently used topical therapies for claw horn lesions.

Through clinical experience, we hypothesize the most common topical treatment would contain a tetracycline derivative, which are known to cause irritation to skin and are advised not to be applied to broken skin lesions. Clinical observation of cows during the immediate post-treatment period suggests that products containing tetracycline derivatives cause significant discomfort to the animal when applied to raw corium tissues.

Our research group created a survey to document the most common approaches used by veterinarians and hoof trimmers to treat claw horn lesions. The survey was distributed to both veterinarians and hoof trimmers through the AABP and the HTA. Members of these

organizations were invited to participate in an on-line survey where both groups were asked the same set of questions concerning their experience with treating bovine claw horn lesions. Results of this survey were intended to provide guidance for a follow-up study by the research group to assess the effect of commonly used topical treatments on post-treatment pain and recovery rates.

Materials and Methods

An on-line questionnaire using the web-based program SurveyMonkey® (www.surveymonkey.com) was chosen since it would allow responses from each participant to remain anonymous. The survey contained a variety of close-ended questions that in some cases permitted participants to choose multiple responses and/or write additional comments, which allowed the respondent to supplement their choices. Information targeted by the survey related to demographics of the respondents, training/education, experience level, use of topical medications, opinions about pain associated with claw horn lesions, and technical approach to trimming lesions.

Results and Discussion

A total of 307 surveys were used in the analysis, the majority of which were veterinarians affiliated with AABP (64%) followed by hoof trimmers affiliated with HTA (36%). Results of the survey expose the strengths and weaknesses of veterinarians and hoof trimmers in the management of foot care. Complete survey results will be published in the upcoming edition of the Bovine Practitioner.

As a result of this project, our research group has initiated a study to look more closely at common treatments for claw horn lesions. Specifically, we are trying to determine if there are negative implications regarding healing and pain associated with these treatments. The project started in October 2013 and should be completed winter 2014.

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