

CLINICAL EVALUATION OF THE THERAPEUTIC EFFECT OF DICHLOROPHEN SPRAY IN TREATMENT OF DIGITAL DERMATITIS IN CATTLE

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Abstract:

Digital dermatitis is one of the most important infectious diseases of feet region in dairy cows. Economic aspect of disease is important because of decreased milk yield, weight loss, impaired reproductive performance, increased number of cows culled, and cost of treatment and control. Since 1979 more than 80% of dairy farms in Iran have experienced this disease. Little is known about the cause and epidemiologic impact of disease. It is believed to be a multifactorial disease in which infectious agents are primarily involved. Some other predisposing factors are host skin defence mechanism, humidity, temperature, and housing. Many therapeutic methods have been experienced for treatment and control of disease such as copper sulfate and formalin foot bath, surgical removal of lesions and use of antibiotics as foot bath or by local spraying, that the latest has have better results. But residues in milk and meat and bacterial resistance must not be ignored as sequelae of the use of antibiotics. Because of these problems, this study was performed to examine the therapeutic effects of commercial dichlorophen spray in sporadic cases of digital dermatitis.

Twenty cows with clinical lameness due to digital dermatitis were chosen and divided to four equal groups (3 treatment groups and the fourth group as a control). After washing the affected feet with medium pressure running water, the heel and pastern area were sprayed with commercial dichlorophen (contains dichlorophen 7.5% w/v) for one day in group 1 , two days in group 2 and three days in group 3. In control group distilled water was sprayed in area for three days.

One week after the beginning of the treatment, cows were examined clinically. Lameness in all treated cows was abolished except the cows in control group. Examination of feet lesions showed some improvement in group 1 and more improvement in group 2, but not completely, and signs of fresh lesions especially in periphery of the healed areas were observed. In group 3 improvements was complete and no signs of fresh lesions was observed. In controls no signs of healing were observed.

Based on the results of this study, for treatment of sporadic cases of digital dermatitis with commercial dichlorophen spray, it is recommended that this agent to be applied at least for three consecutive days.