Clinical Field Trial of Topical Application of Provita Combat Hoof Spray for Individual Treatment of Papillomatous Digital Dermatitis in Dairy Cows

Nasrin M.,1 Nazari Z.,2 Khorasani Seyed Javad SM,1 Shad H.2
1 Private Practitioner
2 Faculty of Veterinary Medicine, Tehran University, Tehran, Iran
Email: mnosori@yahoo.com

Despite the widespread nature of Digital Dermatitis, there have been few peer-reviewed published reports of the effectiveness of treatment regimes. However, three approaches to Digital Dermatitis treatment have been used. (1) systemic antibiotics, (2) individual topical treatment, and (3) mass topical therapy which are still controversial when the control and prevention of disease is concerned in a herd level.

The present field study was conducted in five herds with a total population of 2430 milking cows on 160 affected cows bearing different lesions of Papillomatous Digital Dermatitis (PDD). In each dairy 16 cows selected and allocated randomly in one of the two following groups. Treatment: topical spray of Provita Combat in (n=8) and topical dressing with Solka Hoof gel + bandage (n=8). The lesion type (0-4), pain (0-2), color (0-2) and size (0-2) scoring prior to application of Provita Combat and Solka Hoof gel were used prior to the end of trials and comparison was made statistically using Non-parametric U-test with 0.05 level of significance. From the photographs taken in each treatments, the healing rate and the slope of linear regression were calculated and comparison was made statistically by using One Way Non-parametric Analysis of Covariance.

Results showed a significance difference in evaluated Total Lesion Scores (T.S) between two groups in favour of topical spray of Provita Combat, -7.36 and -5.14 respectively. It was also confirmed that the speed of healing rate had a significant steeper slope (b = -0.68) in group using Provita Combat. It’s concluded that the feasibility of Provita Combat Spray application is high and the complete healing pattern achieved significantly in cow particularly when the campaign program of PDD is concerned with Provita Hoof care Endurance in a herd level.

Key words: Provita Combat Hoof Spray, Papillomatous, Digital Dermatitis, Dairy Cows