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Pilotstudie för att utvärdera effekten av L-Mesitran

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Uppsala 2011

SUMMARY

Pyoderma is a very common skin disease in dogs and should always be considered as a secondary infection to an underlying disease. The diagnosis is based on clinical appearance and results from cytology examination. Surface pyoderma is the most superficial and mild form of pyoderma where bacteria has colonized stratum corneum, the outer, keratinized layer of the skin, and causes an inflammation. Some breeds like boxer, pugs and English bulldogs are predisposed to develop this type of pyoderma, as their anatomy holds several skinfolds, where a favourable environment for microorganisms is created.

Surface pyodermas are usually treated topically with antibacterial shampoo and/or topical antibiotics. Use of antibiotics induces a risk of bacteria developing resistancy, which is an increasing medical problem. L-Mesitran is a honey based CE-marked wound ointment, which doesn't contain any antibiotics. Honey has in several studies proved to carry a good antibacterial effect and the use of this ointment doesn't causes the risk of inducing resistant microorganisms. The purpose of this study was to evaluate if L-Mesitran was effective for treatment of surface pyoderma in dogs, in a blinded, randomized, prospective study.

The study included 40 skin areas with surface pyoderma from totally 29 privately owned dogs. The dogs were examined and the clinical lesions in the skin were graded (max score 9) and specimens for cytology were graded with respect to presence of bacteria and neutrophils at inclusion (day 0) and after 14 days of treatment. The areas were randomly assigned into two treatment groups, 3% chlorhexidine shampoo (Pyoderm) or honey based ointment (L-Mesitran). In four cases the treatment instructions were not followed correctly and thus were excluded from the study. Totally 23 skin areas were treated with Pyoderm and 13 with L-Mesitran. The clinical signs and results of cytology of both treatment groups revealed no significant differences either at inclusion or following the treatment period. In total 85% of the areas treated with L-Mesitran were considered cured, compared to 78% for the areas treated with Pyoderm. There was no statistically significant difference between the treatment groups with respect to cure rate. The pet owners perceived that the treatment with L-Mesitran was easier and less time-consuming to perform as compared to using shampoo. No side effects were noted with the treatment of L-Mesitran, while two pet owners experienced that their dogs became pruritic with Pyoderm treatment.

In summary: This pilot study shows that L-Mesitran is effective for treatment of surface pyoderma in dogs and that the ointment is safe to use. The results shows that L-Mesitran as effective as shampoo treatment with 3% chlorhexidine. In order to improve statistical power of the study, the study needs to be continued and should include at least 40 skin areas in each treatment group. The pet owners considered the treatment with ointment easier to perform compared to washing with antibacterial shampoo.