

THE EFFECT OF LOCALLY APPLIED CREAMS E-1 AND T-1 ON THE HEALTHY SKIN OF LABORATORY ANIMALS

Algimantas Matusevičius¹, Marija Ivaškienė¹, Vytautas Špakauskas¹, Ramutė Mišeikienė², Alius Pockevičius³

¹*Laboratory of Experimental and Clinical Pharmacology, Department of Non-Infectious Diseases, Veterinary Academy, Lithuanian University of Health Sciences*

Tilžės str. 18, LT-47181 Kaunas, Lithuania; Tel.(8-37) 36 30 41; E-mail: amatusевичius@lva.lt

²*The centre of animal nutrition and biotechnology, Veterinary Academy,*

Lithuanian University of Health Sciences, Tilžės str. 18, LT-47181 Kaunas, Lithuania

³*Department of Infectious Diseases, Veterinary Academy, Lithuanian University of Health Sciences*

Tilžės str. 18, LT-47181 Kaunas, Lithuania

Summary. Newly designed creams E-1 and T-1 were prepared for the treatment of dogs and cats suffering from dermatomycosis caused by a microscopic fungi – dermatophytes. Active ingredients of creams E-1 and T-1 are econazole and terbinafine, respectively. The results showed that prolonged use of the E-1 and T-1 creams did not raise an allergic or inflammatory reactions. The thickening of skin fold was transient and was due to the skin absorption of water from creams. Moisturisation of the skin is a positive factor, which helps to remove the damaged tissue from the surface of inflamed skin and to restore the barrier properties of the skin. Active agents, such as econazole and terbinafine, penetrate easier into the skin and eliminate dermatophytes. Prolonged use of topical E-1 and T-1 creams slightly irritates the skin. Irritation present as skin reddening and increase in thickness of skin epidermis. Discontinuance of application of creams results in rapid disappearance of the symptoms. Topically applied creams are safe, because they do not cause contact dermatitis and are well-tolerated by animal.

Keywords: cream, econazole, terbinafine, skin, laboratory animals.