



**EUROPEAN SOCIETY OF
VETERINARY DERMATOLOGY**

1, 2, 3 september 1995

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FINAL PROGRAMME / PROGRAMA FINAL

FREE COMMUNICATIONS



SUNDAY SEPTEMBER 3rd

VETOQUINOL B ROOM (9.00 - 10.15)

- 09.00 - Efficacy of an Omega-3 fatty acid adjusted diet in pruritic dogs. (R.O. Schick, M.P.Schick, G.A.Reinhart)
- 09.15 - The composition of unsaturated fatty acids from subcutaneous fat and blood plasma from dogs with and without skin and coat problems. (O.Taugbøl, B.Taugbøl, Kristin Saarem)
- 09.30 - Involucrin and filaggrin expression in normal dog skin and different epidermal hyperplasias. (H. Vala, D.Fondevilla, L.Ferrer.)
- 09.45 - Immunohistochemical characterization of cell infiltrate in ovine ocular squamous cell carcinoma. (E.Mozos, J.Perez, A.Méndez, M.Chacón, F. de Lara, P.Herraez, M.A.Sierra.)
- 10.00 - Scopulriopsis brevicaulis in equine «White line disease» (E. J. Tjalsma, H.van Maurik)
- 12.00 - A study of the number and distribution of cutaneous mast cells in the horse. (D.H.Shearer, F.K.Green, A.L. Lee)

VETOQUINOL B ROOM - POSTER'S LECTURE (11.30)

- 11.30 - Hypothyroidism in the cat: Retrospective data from 269 cases. (B.Siliart, F.Stambouli.)
- Malassezia pachydermatis in normal and seborrheic dogs. (P.Bourdeau, L.Marouteix.)
- Pulicosis and Ctenocephalides felis in the dog and the cat: Parasitological and biological particularities in the west of France.(P.Bourdeau, P.Blumstein)
- Fungal and bacterial flora on skin and shell of Testudo hermanni. (P.Bourdeau, J.Bouvard.)
- Sarcoptic mange in dog shelters of Madrid: Seasonal prevalence and response to treatment. (A. Alonso, P. Lopez-Suarez, C. Ruperez, G. Miró).



INVOLUCRIN AND FILAGGRIN EXPRESSION IN NORMAL DOG SKIN AND DIFFERENT EPIDERMAL HYPERPLASIAS

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Terminally differentiated mammalian epidermal cells are lined with a 16 nm thick layer of proteins. This layer, formed underneath the plasma membrane and cross-linked by isodipeptide bonds, is called Cornified Cell Envelope (CE). The CE maintains the structural integrity of the epidermis and serves as a vital barrier protecting the internal medium from external influences.

The Involucrin is one of the proteins identified as potentially major constituent of the CE and it has been detected in the cytoplasm of the keratinocytes of the upper third of the epidermis -stratum spinosum, granulosum and inner stratum corneum. The filaggrin has also been reported to be a significant CE component, its functions are aggregating keratin filaments and maintaining a normal hydrating state of the stratum corneum. It was detected in the cytoplasm of stratum granulosum epidermic cells.

It has been demonstrated that involucrin and filaggrin expression is altered in tumors and in numerous cutaneous diseases of humans. However, similar investigations, as far as we know, have not been done on the dog.

The objective of this work was to investigate, using an immunohistochemical technique, the expression of involucrin and filaggrin in normal dog skin and in different canine diseases, including inflammations and primary defects of keratinization. It was verified that the antibody anti-involucrin reacted against canine epidermis with a weaker reaction than against the normal human epidermis. Samples of normal canine epidermis revealed a discrete line of immunoreactivity that corresponded with the stratum granulosum. In all canine hyperplasias with hypergranulosis and acanthosis, we found positive reaction in the layers of hyperplastic stratum corneum, stratum granulosum and upper stratum spinosum. In the parakeratotic diseases there was no reactivity. In the normal canine skin it was found a weak reaction in the stratum granulosum with the antibody anti-filaggrin and a stronger reaction in the hair follicles. In all canine hyperplasias with hypergranulosis it was found an intense reaction in the stratum granulosum and in some hyperplasias with hyperkeratosis in the stratum corneum.