POSTER PRESENTATION



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P-cadherin expression in feline mammary tissues

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Placental cadherin (P-cadherin) is a classical cadherin [1] expressed by myoepithelial cells of the human mammary gland [2,3]. Changes to P-cadherin expression have been observed and implicated in human breast carcinogenesis [4-6]. Feline mammary tumours show similarities with the women tumours concerning many histological characteristics and clinical evolution, being proposed as good animal model to study mammary carcinogenesis [7].

To study P-cadherin expression in feline mammary gland an immunohistochemistry assay was performed in 61 samples of normal (n = 4), hyperplastic (n = 12), benign (n = 6) and malignant (n = 39) feline mammary tissues and the immunostaining assessment was based on the estimated percentage of luminal epithelial cells labeling (aberrant expression).

In normal mammary gland, mammary hyperplasia and benign tumours, P-cadherin immunolabelling was restricted to myoepithelial cells. Nevertheless, in malignant tumours there was an aberrant epithelial Pcadherin immunoexpression in 64,1% (n = 25) of the cases, with a membranar and/or cytoplasmic pattern of cellular distribution. Consequently, P-cadherin expression in feline mammary lesions was not exclusive of myoepithelial cells.

It was possible to observe a significant statistical correlation between P-cadherin expression intensity and feline mammary lesions (p = 0.0001). In malignant mammary tumors a statistical correlation between P-cadherin immunoexpression intensity and histological grade was observed (p = 0.0132). Aberrant epithelial P-cadherin expression seems to be correlated with tumor malignancy in feline mammary gland.

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