

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 P-cadherin immunorexpression 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 immunorexpression 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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