

## ANALYSIS OF PREVALENCE OF THE MOST COMMON CANINE SKIN AND MAMMARY TUMOURS

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**INTRODUCTION.** Skin tumours are the most common tumours in dogs, accounting for approximately 30% of all diagnosed tumours. Mammary glands are the second most common site for tumour development subsequent to dermal sites in dogs and account for approximately 82% of all tumours in reproductive organs.

**MATERIALS AND METHODS.** The samples of skin and mammary tumours were selected from suspected dogs. Formalin buffer solution 10% was used as a fixative. A record was filled in with the data about the age, sex and breed of dogs, number and location of tumours and growth characteristics. The samples of tumours were embedded in paraffin blocks, cut into 4 µm thick sections and stained using the standard hematoxylin-eosin staining method. Microscopic analysis was described in detail and photographed. The final histological diagnosis was made according to the origin and differentiation of tumour cells.

**RESULTS.** Macroscopic and histological analyses of the skin and mammary biopsies were performed on 116 dogs (56 males and 60 females). Benign tumours accounted for 50.8% and malignant tumours for 49.2% of the total. The age of dogs at detection of mammary and skin tumours ranged from 6 months to 19 years. The determined highest incidence (20.7%) of mammary and skin tumours was from 6 to 8 years of age. The most common tumours were: histiocytoma (11.1%) in young dogs (2.97 years of age), mast cell tumour (9.5%) in middle-aged dogs (7.68 years) and simple mammary carcinoma (14.7%) in older dogs (9.72 years). Females were more affected by simple mammary carcinoma (100%) and by lipoma (66.7%) while males were more affected by hepatoid gland adenoma (83.3%) and by histiocytoma (61.5%). The prevalence of tumours in purebred dogs accounted for 73.3% and in mongrels 26.7%. The skin tumours were most frequently located in the limb regions (28.5%). The multiple tumours identified in 27.6% of the examined dogs were comprised of skin melanomas (75.0%), hepatoid gland adenomas (66.7%) and sebaceous gland adenomas (50.0%).

**CONCLUSIONS.** The age, sex and breed of dogs and anatomic location and number of tumours are factors which markedly affect the incidence of skin and mammary tumours. Young dogs are more predisposed to skin histiocytoma, dogs of middle age to mast cell tumours and older dogs to simple mammary carcinoma. The incidence of simple mammary carcinoma and of lipoma is higher among bitches whereas tumours of perianal glands and skin histiocytoma are more frequent in males. The predisposition of purebred dogs to skin and mammary tumours is higher than that of mixed breeds (mongrels). Skin tumours tend to localise in the limb areas. The multiple tumours usually occur in the cases of skin melanoma, adenoma of hepatoid glands and adenoma of sebaceous glands.