

# CYTOLOGICAL AND HISTOPATHOLOGICAL DIAGNOSIS IN MAST CELL TUMORS IN COMPANION CARNIVORES

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## Abstract

Mast cells tumours are considered a member of the round cell tumour group and are one of the most frequent cutaneous and subcutaneous neoplasms in companion carnivores (up to 21%), and are more common in dogs than in cats. They can be diagnosed both through cytopathological and histopathological diagnostic.

In 2020-2021 we diagnosed 11 mast cell tumours in dogs and 2 in cats, out of which 8 through cytological and 5 through histopathological examination. The formations were located in various parts of the body, both cutaneous and subcutaneous. The histopathological examination revealed round, oval, polygonal or even spindle-like cells that had basophilic, intracytoplasmic granules and a central, large, round nucleus. The presence of eosinophils was not observed in all the tumours. The mitotic index and anaplasia degree varied greatly, depending on the benign or malignant character of the tumour.

The cytological examination revealed round cells of a mesenchymal origin that presented basophilic granulations in various degrees. The number of granules varied from case to case, but generally speaking, these were much more easily observed in cytological slides than in the histopathological ones.

**Key words:** *mast cell, tumour, cytopathology, histopathology, diagnostic*

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