

BIBLIOGRAPHIC RESEARCH AND RETROSPECTIVE STUDY ON ORAL TUMOURS IN DOGS: INCIDENCE AND TREATMENTS

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INTRODUCTION

- Oral neoplasms represent 6–7% of canine tumours.
- They range from benign to aggressive metastatic cancers.
- Diagnosis → biopsy, histopathology, and imaging techniques.
- Improved pet longevity and oral health awareness have increased detection rates.

OBJECTIVES

- To **review the scientific literature** on oral tumours in dogs including their main **characteristics and prevalence**.
- To **describe the main treatment options** for canine oral tumours.
- To **perform a retrospective study** of cases from the Hospital Veterinari de Catalunya and **compare** the findings with those reported in the literature.

ORAL TUMOURS



Figure 1: Melanoma (Provided by the teacher Anna Andaluz)

- Oral tumours in dogs may be benign (25–40%) or **malignant** (60–75%).
 - **Melanoma** > Squamous Cell Carcinoma > Fibrosarcoma > Osteosarcoma.
 - **Acanthomatous Ameloblastoma** > Peripheral Odontogenic Fibroma > Papilloma.
- **Predisposed breeds:** Boxer, Golden Retriever, Labrador Retriever, Cocker Spaniel and German Shepherd.
- **Middle-aged or geriatric dogs.**
- **Gingiva** > Palate > Lips and Tongue.
- **Prognosis** depends on tumour type, size, anatomical location, metastatic spread and the possibility of complete surgical excision.

TREATMENTS

SURGERY

Mandibulectomy and Maxillectomy
Glossectomy
Lip and cheek resection
Cryosurgery

MEDICAL TREATMENT

Immunotherapy
Chemotherapy

OTHERS

Radiotherapy
Electrochemotherapy

RETROSPECTIVE STUDY AT HOSPITAL VETERINARI DE CATALUNYA, BETWEEN 2020 AND 2025

Surgical excision was the primary treatment, while **malignant tumors** often required **adjuvant chemotherapy**.

Table 1: Tumours diagnosed at Hospital Veterinari de Catalunya, ordered by frequency (E.Calvo).

Tumor type	Nº cases/%	Age (years)	Sex	Location
Peripheral odontogenic fibroma	30 (41%)	4–14	♀ 2 // ♀c 9 // ♂ 4 // ♂c 15	Man 20 // Max 15
Melanoma	14 (19%)	5–16	♀ 2 // ♀c 4 // ♂ 1 // ♂c 7	Man 4 // Max 1 // Lip 8 // Palate 2
Squamous cell carcinoma	9 (12%)	10–15	♀c 4 // ♂ 1 // ♂c 4	Man 4 // Lip 2 // Tongue 1 // Tonsils 2
Fibrosarcoma	3 (4%)	9–11	♀ 1 // ♂c 2	Man 1 // Max 2
Papilloma	3 (4%)	6–10	♀c 1 // ♂c 1	Lip 3
Mastocytoma	2 (2%)	10–12	♂ 1 // ♂c 1	Man 1 // Lip 2
Plasmacytoma	2 (2%)	9–12	♂c 2	Lip 2
Acanthomatous ameloblastoma	2 (2%)	9–12	♀c 2	Man 1 // Max 1
Epithelioid lymphoma	2 (2%)	12–13	♀c 1 // ♂c 1	Lip 2
Osteosarcoma	1 (1%)	11	♀c 1	Man 1
Hemangiosarcoma	1 (1%)	14	♀ 1	Man + Max + Lip 1
Histiocytoma	1 (1%)	4	♂c 1	Lip 1
Myxosarcoma	1 (1%)	7	♀ 1	Lip 1
No biopsies	2 (2%)	10	♂ 1 // ♂c 1	Max 1 // Lip 1
MAIN RESULTS	73/100%	8-12	No sex predisposition	Mandibular gingiva

♀: female, ♂: male. c: castrated/spayed animals. Man: mandibular gingiva, Max: maxillary gingiva.

CONCLUSIONS

- Canine oral tumors are **common** and include neoplasms with **highly variable biological behavior**. **Oral melanoma** is the most aggressive malignant tumor and has the worst prognosis.
- **Surgery** remains the treatment of choice in most cases. **Multimodal therapies** can improve patient survival and quality of life.
- **Early diagnosis and an individualized therapeutic approach** are key to improving prognosis.
- The **retrospective study agrees with the scientific literature** regarding epidemiology, anatomical location, and treatments used. It differs in the tumor incidence, showing a higher prevalence of peripheral odontogenic fibroma.

REFERENCES

