

Comparative evaluation of a targeted and non targeted NIR dye to improve resection accuracy in canine and feline oral neoplasia

PD Dr. med. vet. Mirja Nolff

Clinic of Small Animal Surgery, Vetsuisse Faculty Zürich, University of Zürich, Winterthurerstrasse 260, 8057 Zürich, Switzerland

Summary

Oral malignant tumors represent 25% of all oral masses. Frequently, soft tissue and bone sarcomas are encountered, but also malignant melanoma or squamous cell carcinomas. Depending on tumor type local tissue invasion and metastatic rate vary.

The treatment of choice is complete surgical excision with 1-2 cm margins and resection of the draining lymph nodes. Incomplete removal is a negative prognostic factor for survival of affected patients, along with the grade and size of the tumor.

Incomplete removals result in fast local recurrence and require additional therapy such as radiation.

Despite these virtual safety margins, the goal of complete removal is not achieved in all cases because the surgeon cannot see or feel the true cellular extensions of the tumor. Recently, tumor visualization using fluorescent dyes has become available in specialized centers. For this purpose, several dyes have already been tested in dogs and cats with promising results. In a recent study in our clinic looking at soft tissue sarcoma, it was shown that with a fluorescent dye (AngiostampTM) all operations in dogs were complete, while without dye 30% of the operations did not reach the desired goal. A similar study from Belgium could prove a corresponding effect in cats.

However, so far it is not clear if the dyes also result in improved resection results in oral solid neoplasia.

Study Objective:

The goal of the study is to compare different fluorescent dyes for improving tumor removal of oral malignant tumors in dogs and cats.

Registration details	
Status of the study	Registered
Date of registration	2023-05-17
Notified date of accessibility	2027-05-01
DOI	10.17590/asr.0000319
Planned start of the study	2023-05-04
Planned end of the study	2027-05-01
License	All rights reserved.