

PHOTODYNAMIC ERADICATION OF NATURALLY OCCURRING TUMORS IN VETERINARY PRACTICE

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Summary. Photodynamic therapy as new and promising cancer treatment was applied to cure spontaneous tumors. In the first phase experimental mice bearing hepatoma tumors were treated by photodynamic therapy. Promising results obtained inspired us to continue the studies. A total of 8 dogs with tumors of different localization (rectum, leg, eyelid, skin, ear, mammary gland) were included in the study.

Photosensitizer was administrated i.v. 10 mg/kg body weight. After 48 hours irradiation with visible light was performed (630 nm, 90 mW/cm² 25 min). Following treatment the tumors were evaluated by detection of tumor necrosis. The results indicate that in all cases examined, regardless of the histological type of tumor, localization and age of a dog, deep necrosis and tumor regression were observed.

Keywords: photodynamic theory, tumor, treatment.