Photodynamic therapy of superficial nasal planum squamous cell carcinomas in cats: 55 cases.

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BACKGROUND: Squamous cell carcinomas (SCCs) are common skin tumors in cats. We investigated photodynamic therapy (PDT) using the photosensitizing agent 5-aminolaevulinic acid (5-ALA) topically and a high-intensity red light source. HYPOTHESIS: PDT is a safe and effective treatment for feline SCCs. METHODS: Fifty-five client-owned cats with superficial nasal planum SCCs. METHODS: Prospective, uncontrolled clinical trial. PDT was performed using topical 5-ALA and light of peak wavelength 635 nm. Adverse effects, response, and tumor control were evaluated. RESULTS: 53/55 (96%) cats responded to therapy, and there was a complete response in 47/55 (85%). Six cats (11%) had a partial response. Of the 47 cats with complete response to a single treatment, 24 recurred (51%), with a median time to recurrence of 157 days (95% confidence interval, 109-205 days). Repeat PDT was performed in 22 cats, and at a median follow-up of 1,146 days, 23 (45%) cats were alive and disease free, 17 (33%) had to be euthanized due to tumor recurrence, and 11 (22%) were euthanized for other reasons. Only transient mild local adverse effects were observed after treatment. CONCLUSIONS AND CLINICAL IMPORTANCE: PDT using 5-ALA and a red light source was safe, well tolerated, and effective in the treatment of superficial nasal planum SCCs of cats and offers an alternative to conventional therapy. Although initial response rates were high, this treatment did not lead to a durable remission or cure in all cases.

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