Case Report

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Successful Treatment of Feline Nasopharyngeal Lymphoma by Hypofractionated Radiation Therapy After Surgical Debulking in a Cat

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Abstract A 3-year-old spayed female Russian blue cat was presented for dyspnea, nasal discharge, and stertorous breathing. Plain thoracic radiography revealed no specific findings. Computed tomography (CT) was performed to differentiate upper airway tract disorders. It revealed the presence of an iso-attenuating mass measuring 10.0 × 7.9 × 15.6 mm, with mild homogeneous contrast enhancement occupying the rostral nasopharynx. The mass was surgically debulked via a longitudinal incision in the soft palate. Histopathological and immunohistochemistry analysis of the surgically excised mass revealed CD3–/CD79a+ B cell lymphoma with an incomplete margin. The patient underwent hypofractionated radiation therapy, receiving a total of 36 Gray (Gy) in 6 Gy fractions over a six-week period. A follow-up CT examination was performed after 27 months of irradiation and the patient was confirmed to have achieved a complete response. There were no complications related to irradiation. The patient was alive for 40 months without recurrence. This study suggests that hypofractionated radiation therapy combined with surgical debulking could be considered as a treatment option for feline nasopharyngeal lymphoma.

Key words radiotherapy, hypofractionated radiation therapy, cat, nasopharyngeal lymphoma.

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