



Palliative neck radiation in dogs with chemoresistant high grade lymphoma

Sarah L. Mason and Jane M. Dobson

Queens Veterinary School Hospital, University of Cambridge
oncology@vet.cam.ac.uk

■ Introduction

Lymphoma is a systemic neoplasm and standard of care is systemic chemotherapy. Lymphoma is highly radiosensitive and radiation (RT) also plays a role in management of specific presentations. In patients with chemoresistant disease, RT to specific lymph node beds can provide palliation of associated clinical signs. Specifically, in the neck region, this can relieve airway obstruction.



Figure 1: regional lymphadenopathy

■ Objectives

To report the clinical benefit of palliative neck radiation (RT) in dogs with chemoresistant high-grade lymphoma.

Case	Signalment	Previous chemotherapy	Chemotherapy during RT	Treated site	Radiation dose and protocol	Response to RT	PFI after RT days	PFI total days	Relapse local or systemic
1	8y11m border collie MN, 23kg	CHOP	CHOP	R SMLN	24 Gy in 3 weekly fractions 15MeV electrons	SD	42	151	Systemic (TB LN)
2	6y GSD, MN, 34kg	COP, doxorubicin, LAP, DMAC	Temozolamide	SMLN bed	17 Gy in 2 weekly fractions. First fraction 6MV photons, second 6MeV electrons	CR	65	392	Local (peripheral LN) and systemic (pulmonary)
3	8y FN XB 21.4kg	CHOP	None	SMLN bed	8.5Gy single fraction 6MV photons	SD	3	64	Systemic (Liver)
4	12y FN JRTX 5.7kg	High dose COP, doxorubicin lomustine, cytarabine	Prednisolone	Nasal cavity and SMLN	16Gy in 2 weekly fractions 6MV photons	CR	>60	353	Local and systemic

■ Statement

Palliative neck radiation can provide clinical benefit via reducing airway obstruction and improved quality of life in some patients with chemoresistant lymphoma, with response durations similar to rescue chemotherapy. Decision making should be made on an individual patient basis with consideration of the specific clinical situation



Figure 2: Linear accelerator used for treatment



Figure 3: Treatment position