Large granular lymphoma in six cats

R. Sapierzyński1, U. Jankowska2, D. Jagielski2, K. Kliczkowska-Klarowicz1

1 Department of Pathology and Veterinary Diagnostics, Faculty of Veterinary Medicine, Warsaw University of Life Sciences (SGGW), Nowoursynowska 159c, 02-766 Warsaw, Poland
2 Bialobrzeska Veterinary Surgery in Warsaw, Poland

Abstract

Large granular lymphomas (LGLs) comprise a specific group of lymphomas regardless of classification scheme. An LGL consists of cells that show less or more mature morphology, but typically neoplastic cells possess cytoplasmic azurophilic granules clearly visible during cytological examination. The aim of the present study was to present clinical and cytological data on large granular lymphomas in cats and to analyses the therapeutic responses in treated cases. During the period from 2012 to 2014 six cats were as having large granular lymphoma. In one cat a nasal form of LGL was recognized, a systemic form was recognized in another cat, and in four cases an alimentary form was recognized. Cellular samples for cytopathology were collected from the cat with nasal cavity mass, from the enlarged mandibular lymph node and thoracic cavity from second cat, and in four cats from the abdominal mass during ultrasound-assisted fine-needle biopsy. Therapy was introduced in 5 of the 6 cats. In two cases palliative therapy with glucocorticoids was conducted, in two cases chemotherapy with COP protocol, and therapy with masitinib in one case. The median of survival time for cats treated with anticancer therapy was 9 months, the median of survival time for cats treated with glucocorticoids was 1.5 months. In conclusion, large granular lymphomas, especially the alimentary form, are a relatively common type of lymphoma in cats. Simple diagnostic methods such as clinical examination, imaging techniques and routine cytology are sufficient in majority of cases. Despite aggressive behavior and poor general prognosis, conventional chemotherapy lead to a good response in some treated cats regardless of anatomic form and histologic grade of malignancy.

Key words: cat, cytology, large granular lymphocyte, large granular lymphoma

Introduction

Lymphomas are the most common malignant tumors recognized in cats, accounting for about 50-90% of hematopoietic tumors and for approximately 20-25% of all neoplasms in this animal species. Large granular lymphomas (LGLs) comprise a specific group of lymphomas regardless of classification scheme. An LGL consists of cells that show less or more mature morphology, but typically neoplastic cells possess cytoplasmic azurophilic granules clearly visible during cytological examination. It seems that LGLs are tumors that are not commonly recognized in cats because they comprise only 6-10% of alimentary lymphomas (Krick et al. 2008, Pohlman et al. 2009, Moore et al. 2012). On the other hand, nowadays alimentary lymphoma is the most common anatomic form of lymphomas in cats. Additionally, in one