Flat-coated Retriever Report March 2016

Dr Jane Dobson, University of Cambridge

Tumour Survey

After 25 years of accruing data and samples, we decided that the Tumour Survey had served its purpose and run its course. The number of samples submitted had declined year on year for the past 5 years, and Tess Hoather, the stalwart of running the Survey has recently retired. The Tumour Survey was closed at the end of 2015 and we will no longer offer the free histopathology service for the Breed. The publications that have arisen from this work are listed below. We would like to take this opportunity to acknowledge the contribution of the following people and thank them for all their support over these 25 years:

The Trustees of the Flatcoated Retriever Tumour Survey, and all those who have raised funds to support this work. Madeline Fordham & all the staff in the Histopathology laboratory who have processed the samples, Dr David Bostock and the many Pathologists & Residents who have reported for the Tumour Survey over the years.

Tess Hoather is currently supported by a Bursary from the Flatcoated Retriever Health Committee to archive and catalogue all the tissue and blood samples we have received over the years, as a valuable resource for future work.

Our interest in Flatcoated Retrievers and other breeds affected with histiocytic sarcoma (HS) will not end. In 2013 in conjunction with the Flatcoated Retriever Society's Breed Health Sub-Committee, we set up a website data-base to monitor the "health" of the breed by recording the cause of death when dogs die. We believe that this is an innovative and effective way to monitor the health of the breed that may shed light on new or emerging problems and show trends in health issues. In the event of a FCR death we very much hope owners will find the strength to help the Breed by visiting the Flatcoated Retriever Society Website, clicking on Health, then follow the links to the Cause of Death Register and completing the short questionnaire.

Our team at Queens Veterinary School Hospital Cancer Therapy Unit (QVSH CTU) maintains a strong interest in the breed and in HS in general. Dr Sarah Mason, who joined us in 2015 as Principle Clinical Oncologist, has a particular interest in the medical and multi-modal therapy of HS, and Dr Marcinowska continues her research into HS tumour microenvironment. We would therefore very much like to hear of Flatcoated Retrievers affected with histiocytic sarcoma. The QVSH cancer therapy team are always willing to see patients diagnosed with HS and to advise on the treatment options which can be adapted for individual patients. We are also pleased to advise primary veterinarians on any aspect of diagnosis and case management, and would welcome the opportunity to receive tissue collected for diagnostic purposes from such cases.

Publications & Presentations arising from our Studies into Cancer in flat-coated Retrievers.

- 1. Morris JS., Bostock DE., McInnes EF., Hoather TM., Dobson JM. A histopathological survey of neoplasms in flat-coated retrievers: 1990 1998. Veterinary Record 147: 291 295, 2000.
- 2. Morris JS., McInnes EF., Bostock DE., Hoather TM., Dobson JM. Immunohistochemical and Histopathologic features of 14 malignant fibrous histiocytomas from flat-coated retrievers. Vet Pathol 39: 473 479, 2002.
- 3. Mellanby RJ., Holloway A., Chantrey J., Herrtage ME & Dobson JM. Immune-mediated haemolytic anaemia associated with a sarcoma in a flat-coated retriever [Case Report] Journal of Small Animal Practice 45: 21 24, 2004
- 4. Dobson J.M. Villiers E., Roulois A., Gould S., Mellor P., Hoather T., Watson P. Histiocytic sarcoma of the spleen in flat-coated retrievers presenting with regenerative anaemia and hypoproteinaemia. Veterinary Record 158 (24) 825 829, 2006
- 5. Dobson J.M., Hoather T., McKinley T.J. & Wood J. Mortality in a Cohort of Flat-coated Retrievers in the UK. Veterinary and Comparative Oncology, 7 (2): 115 121, 2009
- 6. Constantino-Casas F., Mayhew D., Hoather T.M. Dobson J.M. The presentation and classification of histiocytic sarcomas in the flat-coated retriever. Veterinary Pathology May 2011 48: 764-771, first published on October 7, 2010 doi:10.1177/0300985810385153
- 7. Abbondati E, Del-Pozo J, Hoather T, Constantino-Casas F, Dobson J An immunohistochemical study of the expression of the hypoxia markers Glut-1 and Ca-IX in canine tumors. Veterinary Pathology 50(6):1063 1069, 2013. E pub 29th April 2013

Presentations

- 1. Morris JS, Bostock DE., McInnes E., Hoather T., **Dobson JM**. A histopathological survey of cancer in the Flat-coated Retriever. Clinical Research Abstract, BSAVA Congress 1999, Congress Synopses p 314.
- 2. Aguirre_hernandez J., Dobson JM., Hoather T. Sargan D. Inheritance of histiocytic sarcomas in flat-coated retrievers. BSAVA Congress 2005 Scientific Proceedings p 634
- 3. Dobson JM Radiation response of appendicular histiocytic sarcoma in flat-coated retrievers. ESVONC Spring meeting, Cambridge, March 2007
- 4. Marcinowska A, Hoather T, Williams T, Dobson J, Constantino-Casas F Assessment of infiltrating lymphocytes in histiocytic sarcoma of Flat-coated retriever: a comparison of different locations. ESVONC Congress 2014.

Cause of Death Register

Report / Update March 2016

To date 412 dogs have been entered into the Cause of Death Data-base.

Year of death	Number entries
Pre 2005	11
2005	8
2006	2
2007	11
2008	4
2009	10
2010	18
2011	24
2012	57
2013	115
2014	81
2015	68
2016	3

Sex

Female: 195 140 neutered, 55 entire

Male: 217 106 neutered, 111 entire

26 Liver, remainder Black

Cause of death, entries, general category

Cause	Number affected		comment
	N	%	
Endocrine disease	0		
Gastrointestinal disease	10		5 GDV
Haematological	10		Haemolytic anaemia, 3
Heart disease	16		
Kidney disease	19		Not specified
Liver disease	4		
Musculo-skeletal	4		

Neurological	6	
Old Age	30	
Other	19	Suspected haemorrhage, 3
Respiratory disease	3	1 x laryngeal paralysis
Trauma / accident	5	RTA most common
Tumour / cancer related	268 65%	See separate table
Unknown	17	Quite a few "sudden death"

Comment

A lot of dogs have been entered since my last report, which is encouraging, and interestingly has reduced the percentage of tumour-related deaths (a bit). Perhaps this is good reason to continue promoting the Register within the breed, to highlight the need for vigilance with respect to other problems, for example, Gastric-dilation-volvulus, accounted for at least 5 deaths and cardiomyopathy appears to be the most common form of heart disease.