



**UNIVERSITY OF
CAMBRIDGE**
Department of Veterinary Medicine

Dr David Sargan
Dept of Veterinary Medicine
Madingley Rd
Cambridge CB3 0ES

Anal sac apocrine gland carcinoma in Cocker Spaniels and other spaniel breeds

Form for your vet:

Cocker spaniels suffer anal sac gland carcinoma with very high frequency (relative risk of ± 7) when compared with the whole dog population (Polton et al., 2006). Other spaniel breeds also show a predisposition to this tumour, although at a less elevated level. We have performed immunochemical studies on anal sac gland carcinomas with E-cadherin to develop methods for prognostic assessment, showing an association of E-cadherin staining of the tumour with enhanced survival (Polton et al., 2007). The high level of breed specificity of this tumour implies a genetic element in predisposition to it. We are now collecting samples for a study using high density genetic mapping techniques to compare anal sac gland carcinoma affected and normal animals. This will allow us to recognise chromosome regions, and eventually genes, associated with the predisposition to this tumour. We hope to throw light on the biology of this adenocarcinoma and may also be able to develop DNA profiling tests that will allow vets to provide breeding advice leading to reduction of the frequency of this tumour in cocker spaniels.

We are looking to collect blood samples from anal sac gland carcinoma affected cocker spaniels, affected dogs of other spaniel breeds and control dogs (healthy dogs of ten or more years old, without any history of cancer). We would welcome participation from you and your clients in this research. Note that we operate under the constraints of the Animals Scientific Procedures Act and the Veterinary Surgeons Act, and can only accept blood samples if they are excess from samples drawn for normal clinical purposes. We require that your client signs the submission form to indicate informed consent. We also request that clients provide a copy of a five generation pedigree, and for cancer affected animals a copy of the pathology report if these are available.

As an incentive to assist the collection of suitable control samples we are happy to offer your clients **geriatric blood screens free** to suitable patients. These are cocker spaniels with no previous history of cancer, over the age of ten years, that in your professional view would benefit from the screen. The screen will consist of a complete blood cell count and liver and kidney profiles. This offer is limited to the first fifty blood samples sent in. An announcement will be made on our web site and to submitting vets by email when this offer closes. A sample submission form for cancer affected and control blood samples is attached. For more information about this offer please contact David Sargan, email: drs20@cam.ac.uk. For more information about anal sac gland carcinoma and clinical aspects of this study please contact Gerry Polton: gpolton@ndsr.co.uk

David Sargan, Gerry Polton (University of Cambridge and North Downs Specialist Referrals, Betchingley, Surrey)

Ref:

Polton GA, V. Adams V, L. M. Green LM, M. J. Brearley MJ, T. J. Scase TJ (2007) **Expression of E-Cadherin in Canine Anal Sac Gland Carcinoma and its Association with Survival**. *Veterinary and Comparative Oncology* **5**: 232-238

Polton GA, Mowat V, Lee, HC, Mckee KA, Scase TJ (2006) **Breed, gender and neutering status of British dogs with anal sac gland carcinoma** *Veterinary and Comparative Oncology* **4**; 125-31

Anal sac gland carcinoma in Spaniels

Blood Sample Submission Form

Please submit samples to:

Dr David Sargan
Dept of Veterinary Medicine
Maddingley Rd
Cambridge CB3 0ES
drs20@cam.ac.uk Tel: 01223 337686



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We are investigating the genetic causes of predisposition among spaniels to anal sac gland carcinoma. For this we are collecting blood samples from anal sac gland carcinoma affected animals of all spaniel breeds and from cancer free spaniels more than 10 years old. (Note that these blood samples should be residues remaining from blood taken for other clinical purposes benefiting the patient, and should only be sent after informed consent has been obtained from the dog's owner). We would also ask you to submit a copy of the pathology report and a five generation pedigree if these are available.

Anal Sac Gland Carcinoma Patients - Please send clinical excess blood samples (ideally 2ml) in EDTA tubes to Dr Sargan at the address above. Please also send a copy of Pathology report and pedigree if available.

Name and address of veterinarian contributing sample:

.....Date

Spaniel Breed (please circle or name): Cocker English Springer American Cocker
Cavalier KC Other

Pet Name of Dog

Kennel club registration number / name if available.

.....**Gender & Neutering status**..... **Age**.....

Owner Name and Address

.....

Owner signature confirming consent for use of sample for cancer research

Does the dog have an anal sac gland carcinoma? Y N
Is a pathology report available? Y N (please enclose or forward)

Date diagnosis of anal sac gland carcinoma confirmed.....

Is there evidence of metastasis? Y N Unknown

What treatment is being used?

.....
Is a pedigree available? Y N (please enclose or forward)

Many thanks for your assistance with this research

Geriatric Screen in Spaniels – Control samples for cancer research.

Blood Sample Submission Form

Please submit samples to:

Clinical Pathology

Dept of Veterinary Medicine

Maddingley Rd

Cambridge CB3 0ES

clinpath@vet.cam.ac.uk Tel: 01223 337625



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Department of Veterinary Medicine

We are investigating the genetic causes of predisposition among spaniels to anal sac gland carcinoma. For this we are collecting blood samples from cancer free spaniels more than 10 years old. (Note that these blood samples should be residues remaining from blood taken for other clinical purposes benefiting the patient, and should only be sent after informed consent has been obtained from the dog's owner). To assist owners, we are offering free geriatric screens to **cocker spaniels** without any history of cancer over the age of ten years, where the veterinarian considers this to the benefit of the patient.

Geriatric Patients - Please send clinical blood samples in 1 serum tube and 1 x 2ml EDTA tube to the address above. Note that EDTA tubes should be completely filled to ensure EDTA to blood ratio is correct. This free offer will close after fifty blood samples have been tested. Participating veterinarians will be notified.

Name and address of veterinarian contributing sample:

.....Date

Is this a cocker spaniel? Yes No (please indicate)

Pet Name of Dog

Kennel club registration number / name if available. /

.....Gender & Neutering status..... Age.....

Owner Name and Address

.....
Owner signature confirming consent for use of sample for cancer research

.....
Does the dog have any history of cancer? Y N

If Yes, Please give details

.....
Is a Pedigree available? Y N (please enclose or forward)

Many thanks for your assistance with this research