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

English 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., 2005). 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 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 English cocker spaniels and perhaps other breeds.

We are looking to collect blood samples from anal sac gland carcinoma affected English cocker spaniels and affected dogs of other spaniel breeds. **We would welcome your participation in this research.** A sample submission form for blood samples is available overleaf. For more information please contact David Sargan, email: drs20@cam.ac.uk.

David Sargan, Gerry Polton and Timothy Scase (University of Cambridge and Davies Veterinary Specialists).

Ref:

Polton GA, V. Adams V, L. M. Green LM, M. J. Brearley MJ, T. J. Scase TJ (2005) **Expression of Ecadherin in Canine Anal Sac Apocrine Gland Adenocarcinoma and its Association with Survival.** *Veterinary and Comparative Oncology* **3**: 53-54

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



UNIVERSITY OF CAMBRIDGE

Department of Veterinary Medicine

Please submit samples to:

Dr David Sargan

Dept of Veterinary Medicine

Maddingley Rd

Cambridge CB3 0ES

UK

drs20@cam.ac.uk Tel: 01223 337686

We are beginning an investigation the genetic causes of predisposition of spaniels to anal sac gland carcinoma. For this we are collecting blood samples from affected animals of all spaniel breeds.

Please send blood samples (5ml in EDTA) tubes to Dr Sargan at the address above.

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Date

Spaniel Breed (please circle or name):

English Cocker

English Springer

American Cocker

CavalierKC

Other

Pet Name of Dog

.....

American Kennel club registration number / name if available. /

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Gender M F **Neutering status** E N Unknown **Age**.....

Owner Name and Address

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

Is there evidence of metastasis?

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What treatment is being used (if known)?

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Any other information

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Many thanks for your help with this research.