GCCF POLICY

HYPERTROPHIC CARDIOMYOPATHY

Hypertrophic Cardiomyopathy (HCM) is the most common heart disease in all cats including domestic non-pedigree and wild cats. The term simply implies enlargement of the heart muscle. The condition can be a primary familial disease with a genetic basis but myocardial hypertrophy can also occur as a secondary change in response to diseases which increase the work load on the heart eg two common diseases which cause raised blood pressure in cats are chronic renal disease and hyperthyroidism which are both frequently associated with secondary myocardial hypertrophy.

In the following proposal when referring to HCM we are only concerned with the primary familial form of the disease.

1. Information and Education
   To help breeders understand the problem the genetics section of the GCCF website should provide basic information about the condition with links to further sources of information

2. Determine which Breeds are affected and where there is a need to take measures to reduce the incidence of HCM
   a. Published data – inadequate for most breeds.
   b. Pawpeds database – although not fully validated data this resource does give some useful information about the incidence in different breeds
   c. Breed surveys through GCCF breed clubs. This has the potential to give us the most relevant information about the incidence of HCM in pedigree cat breeds in the UK and help to identify which breeds give cause for concern.

3. Promote heart screening by echocardiography in "At Risk" Breeds
   For most breeds echocardiography is the only way of diagnosing HCM. It allows affected cats to be identified and removed from a breeding programme. Its main limitation is that many affected cats do not develop identifiable changes in the heart until they are past breeding age Other factors such as cost and availability of qualified veterinary cardiologists with sufficient expertise in echocardiography are reasons why breeders may not be able or willing to screen for the disease..
   Measures to encourage breeders to screen their cats include:
   a. Publish an up to date list of qualified veterinary cardiologists in the genetics section of the GCCF website
   b. Record screening results for individual cats on the GCCF pedigree database so that information about a cats HCM status would appear on its registration document and in pedigrees.
   c. Publish lists of cats with current negative status on GCCF website, Genetics section.
   d. Publish information about group scanning clinics on the GCCF website. Some centres do provide the service at a reduced rate for groups of breeders. Negotiation of discounted rates for GCCF registered cats may also be possible.

4. Promote DNA testing in "At Risk" Breeds.
   A validated DNA test for HCM is available for two breeds – the Maine Coon and the Ragdoll. This test has the great advantage of showing whether a kitten or young cat is homozygous or heterozygous for the HCM gene or normal and helps breeders select breeding cats and plan matings which are least likely to produce affected offspring. It is also far less costly and

much more readily available than echocardiography. Its only limitation is that one DNA test may not pick up all forms of the disease that occur in a breed.

a. Where a validated DNA test exists for a breed a testing requirement should be introduced into the registration policy for that breed. Results to be recorded on the GCCF pedigree database.
b. Breed clubs should encourage breeders to co-operate with research departments at the veterinary schools and other institutes by providing DNA samples for studies aiming to identify breed specific HCM genes and develop valid DNA tests for the disease..

5. Co-operate with veterinary institutions in other areas of HCM research eg cardiac biomarkers.
