

Norfolk Terrier Health, 2009

By Carol Falk

Having served as Health Chairman for the Norwich and Norfolk Terrier Club for 12 years, I am delighted to have the opportunity to work for and represent one breed. Although our Norfolk is a hardy little dog, we do have some serious health issues, and in 2009 we have worked towards better understanding these issues with the goal of reducing their incidence in the breed.

In 2007 we became a "CHIC breed". CHIC stands for the "Canine Health INFORMATION Center" and was established by the AKC Canine Health Foundation (CHF) in conjunction with the Orthopedic Foundation for Animals (OFA). Each national club is responsible for determining the required (and/or recommended) health concerns for which breeding stock should be screened. In Norfolks, we require a dog to have a CERF eye exam, an OFA patella or knee evaluation, and an ultrasound cardiac evaluation performed by a board certified cardiologist. We also recommend an OFA or PennHIP hip evaluation as well as ichthyosis screening. Cardiac and CERF clearances should be updated periodically as the dog matures.

Although mitral valve disease (MVD) is the most common heart defect in small breed dogs, the Norfolk appears to have more than it's share of this often-fatal problem. Since 2001, we have had researchers looking at MVD in the Norfolk, however, our efforts have, for various reasons, become stalled. In October of this year, the CHF approved a \$26,000 grant to study MVD in the Norfolk. Most of the funds for this study will be drawn from the "Friends of Norfolk Terrier Donor Advised Fund" a separate fund managed by CHF. In addition, the NTC board has approved the allocation of \$4000 from the NTC donor advised fund to support this project.

The MVD study will be spear-headed by Mark Oyama, DVM ACVIM/Cardiology, from the University of Pennsylvania School of Veterinary Medicine. Dr. Oyama, a speaker at the 2009 Canine Health Conference, was the recipient of the coveted CHF Dr. Asa Mays award for excellence in research. The study will also include highly regarded researchers from several other veterinary schools. The grant proposes to examine the following characteristics of MVD:

- Pedigree analysis for mode of inheritance
- DNA collection and banking
- Cardiac blood-based biomarkers of heart disease (BNP, ANP, troponin)
- Markers of inflammation (C reactive protein)
- Serotonin signaling (serum serotonin levels)
- Echocardiographic valve measurements
- Dietary history
- Nutritional plasma amino acid profile.

As currently designed, this will be one of the most comprehensive characterizations of MVD in a single breed! The screenings will most likely take place at Tufts University in Massachusetts and the University of Pennsylvania in Philadelphia. How the initial 50 dogs needed for the study will be selected has yet to be determined. If things go well, and with additional funding, we will also be able to look at candidate genes for MVD rather than just banking the DNA for future use. By the end of 2010 I am hopeful that we will have some initial findings to report.

In addition to MVD, both OFA and PennHIP recognize hip dysplasia as a problem in our breed. The OFA database for hips is what we call a semi-open registry. This means that when you submit a radiograph of your dog's hips to OFA for evaluation, it will automatically become part of the database for Norfolk Terriers. However, unless you check the box on the OFA form when submitting your radiographs allowing the results to be made public, your dog's name will remain private. When you submit your radiograph, you do not know how your dog's hips will be graded. This is different from the patellae, cardiac, and eye registry, as you already know your dog's status before deciding to have it listed in the database. As breeders, are we submitting our dog's abnormal hip results? For many, I suspect, the answer is unfortunately no.

By searching the OFA database, one can see that of the 153 breeds submitting at least 100 radiographs for hip evaluation, the Norfolk is listed as having the **16th worst** hips. An alarming 33% of the 218 radiographs submitted to OFA were graded dysplastic, with none having been rated as excellent. This means that 72 Norfolks were graded dysplastic by OFA; however, when I search the OFA database for Norfolks, I can find only 15 that are listed as such. In other words, there are 57 Norfolks graded as dysplastic whose owners have chosen not to share these results. **By not sharing these results, we are defeating the purpose of CHIC. The "I" in CHIC stands for INFORMATION, and many breeders, although they are obviously performing genetic tests, are still unwilling to share abnormal results.**

I feel we have made good progress in the past 15 years in educating ourselves about our dogs' health. We have admitted that we have problems, and we have begun to test for and address these problems. As someone who has been breeding dogs for 35 years, I understand how difficult it is for many of us to admit that there may be a health issue in our line. Please remember that ALL dogs have or carry genes for health problems and that you are not a bad breeder, or a bad person, and you certainly do not have bad dogs by acknowledging these issues. Through the sharing of ALL information, we can better learn how to breed around many of our health concerns. In 2010 I would like to see us continue to have our dogs "CHICed". I would like to see a hip evaluation added as a CHIC requirement, and I would like to see more of us step up to the plate by making **ALL of our dogs test results public.**