

HOW TO SCREEN FOR HEART DISEASE

By Marion Shaw

This is an article to discuss how we screen for heart disease in our dogs and to update the membership on the current long term study being performed at Tufts University and University of Pennsylvania Veterinary Schools. I have solicited opinions from 3 of the veterinarians involved in the study who have each done numerous ultrasound examinations on Norfolk Terriers: Mark Oyama from the University of Pennsylvania, Luis Braz-Ruivo from Cats and Dogs Veterinary Referral practice in Laurel, MD, and Greg Ferguson of the Chesapeake Veterinary Cardiology associates in Annapolis MD. Auscultation is listening to the heart and lung sounds with a stethoscope. Auscultation skills vary greatly between veterinarians; so for the purposes of health screening, should only be done by a Board Certified Cardiologist. The Doppler Ultrasound is a very sensitive imaging technique which allows the cardiologist to view the size of the chambers of the heart and valve structures to look at blood flow through the vessels leading in and out of the heart. Ultrasound is a very sensitive technique that can pick up changes not heard by auscultation.

The consensus opinion of these 3 cardiologists is that for now that auscultation by a veterinary cardiologist on a yearly basis should be the required testing for our breed. Any dog with a heart murmur should have an ultrasound to determine the cause of the murmur and its significance for

that animals health. Any dog with a murmur before the age of 4 which is documented to be mitral valve in origin should be considered to be abnormal. Doppler Ultrasounds are recommended to be done by age 2 and every other year until the animal is 8 years of age if no murmur is present. Ultrasounds would be continued past the age of 8 if a heart murmur is present to determine what clinical disease present and the course of progression of disease.

The long term study at Tufts University and University of Pennsylvania is being done to determine exactly what happens to the dogs that have no murmur but an abnormal ultrasound. An initial survey showed that 60 percent of dogs ultrasounded had some valvular leakage while few had auscultable murmurs. Does early ultrasound detection help predict which dogs will progress to early heart disease and congestive heart failure? This question is still not answered, and we have to be patient for a few more years while these study dogs are followed over their lifetime. At this point in time none of the cardiologists feel that dogs with no murmurs and trivial or mild leakage should be excluded from the breeding program. This opinion may change as more data is accumulated.

Breeders have recently engaged in heated debate over what should be required for the CHIC testing. One point of view is that auscultation would

encourage larger numbers of breeders to screen and register their dogs. One point of view is that, if we do not require the ultrasound, that this information gathering will be lost. Because we have very little data accumulated over individuals lifetimes, the Norfolk Terrier Club highly encourages breeders to continue to ultrasound their dogs to generate more of this long term data.

As breeders we all have the best interests of our breed at heart, but we need to remember that this is a small genetic pool. At this point we do not want to exclude animals unnecessarily from our breeding program lest some other disease pop up from selective breeding. To this end, we must share information without casting stones or opinions and we must continue to gather this information. Remember that the CHIC data is information sharing. It does not need to be normal and breeders should use this information to select breeding stock based on what is best for their individual programs. Everyone who breeds their dogs should do the CHIC testing on all of their breeding stock.

Please feel free to email me if you have any questions about this article. Marian Shaw shaw@friend.ly.net With his consent I am also posting the communication I had with Dr Oyama in developing this article.

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HOW TO SCREEN FOR HEART DISEASE , CONT'D

LETTER FROM DR. OYAMA...

Hi Norfolk Fans, Just a follow up note.

I understand that everyone is passionate about making sure that breeding dogs and future generations are as healthy as they can be, however, there are massive implications to the breed as well as people's breeding programs if we now exclude dogs on the basis of echo alone.

The problem is that we don't have echo criteria that we KNOW means risk of progressive mitral disease. Its possible that all the dogs with the echo changes and no murmurs never progress to anything that would even remotely affect their longevity or health. If we now exclude these dogs from breeding, we are only going to 1) ruin people's breeding programs, and 2) limit the gene pool such that other congenital defects now appear.

That echo might detect very early disease is an extra-ordinary claim as compared to what is the broad consensus amongst cardiologists that auscultation is the gold standard. As such, in the words of Carl Sagan, extra-ordinary claims require extra-ordinary evidence, and we are not there yet, in my opinion.

I personally believe that the dogs we recently examined without murmurs have MVD, but I have no idea if their MVD will ever affect their health. This is the reason for the longitudinal studies that we are doing. Let's wait and see how these turn out before contemplating major

changes in the way your breeders and clubs operate. To now exclude any dog with any echo change could very well cause more problems than it solves.

I understand the passion and heat that these types of study results generate, but I encourage everyone to take a cautious approach. The breed will not die out in the next 3 years while we learn more about this problem! Everyone is doing what they think is right for the health of their dogs, and if folks want to use echo to make breeding decisions for their own dogs, this is their choice. But, I am not sure that making everyone do this is the right decision at this time.

Again, my opinions.

Thanks for everyone's interest and good intentions,

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