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PRESIDENT'S MESSAGE

Although each and every issue of *Westie Wellness* is special to me, this particular issue is extra special. Why? We have chosen Idiopathic Pulmonary Fibrosis (IPF) - "idiopathic" means "of unknown cause" - as the major topic. Many of you may remember that my Westie experience includes the loss of Rowdy, my first Westie, to IPF. Some years before, I lost my mother to the same awful disease. In order to find much needed answers for Westies and humans alike, I was drawn to the work of the Westie Foundation, discovered a platform from which to focus my efforts in coordination with similar minded people.



Bebe Pinter

What does the future hold for the health of our precious white terriers? The Pennsylvania author, illustrator and dog breeder George Bird Evans said, "I think we are drawn to dogs because they are the uninhibited creatures we might be if we weren't certain we knew better. They fight for honor at the first challenge, make love with no moral restraint, and they do not for all their marvelous instincts appear to know about death. Being such wonderfully uncomplicated beings, they need us to do their worrying." The Foundation is concerned about the present and future health of the Westie; therefore, we fund credible promising research in breed-related diseases and function as a resource on up-to-date health information for breeders, fanciers, pet owners, and veterinarians.

To learn more about a promising IPF treatment read "Westie IPF: What is it? and What can be done about it?" by Richard Vulliet, PhD, DVM, University of Southern California Davis and Pamela Rosman. Then, another interesting article is "Pulmonary Fibrosis in West Highland White Terriers (Westie Fibrosis)" by Liz Rozanski, DVM, Board certified ACVIM, ACVECC, Tufts University. On another important topic, Rosanna Marsella, DVM, DACVD examines "Probiotics in veterinary medicine: can we prevent allergies?" Finally, learn more about bladder cancer in Dr. Deborah Knapp's article "Transitional Cell Carcinoma: Once Considered Incurable, Now Highly Treatable."

Meet us in Pennsylvania the first week of October. Our annual meeting is scheduled for Wednesday, October 5, 2011, and WFA activities include the

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health seminar and sales table at Comfort Suites in Exton, gift items for sale at Kimberton, and silent/live auctions and a raffle drawing Friday night at the annual dinner. We look forward to seeing friends and meeting new ones and their Westies. For me, the words below say it best about our Westies.

"He is my other eyes that can see above the clouds; my other ears that hear above the winds. He is the part of me that can reach out into the sea. He has told me a thousand times over that I am his reason for being; by the way he rests against my leg; by the way he thumps his tail at my smallest smile; by the way he shows his hurt when I leave without taking him. (I think it makes him sick with worry when he is not along to care for me.) When I am wrong, he is delighted to forgive. When I am angry, he clowns to make me smile. When I am happy, he is joy unbounded. When I am a fool, he ignores it. When I succeed, he brags. Without him, I am only another man. With him, I am all-powerful. He is loyalty itself. He has taught me the meaning of devotion. With him, I know a secret comfort and a private peace. He has brought me understanding where before I was ignorant. His head on my knee can heal my human hurts. His presence by my side is protection against my fears of dark and unknown things. He has promised to wait for me... whenever... wherever - in case I need him. And I expect I will - as I always have. He is just my dog."-
Gene Hill, author / columnist

Your gift to the WFA is always valued, responsibly used, and is tax deductible. Your generosity ensures a healthy future for Westies.

Bebe Pinter

New Hope for Pulmonary Fibrosis

By Kay McGuire, DVM, MS, VP of Health

The Westie Foundation's main goal is to fund research of the diseases that most affect the West Highland White Terrier. Atopic Dermatitis is the main cause of Westies being given up to new homes, turned into rescue organizations, and euthanasia. The cost of treatment of skin diseases and the suffering that the dogs endure is extreme.



There are other maladies which affect Westies that are more serious and life-threatening. One such fatal disease is Westie Lung Disease, also known as Pulmonary Fibrosis. The Westie Foundation has made efforts to support research in this area hosting a health seminar at the Montgomery County Specialty weekend in October, 2002. The seminar was presented by Dr. Brendon Corcoran, MVB, DipPharm PhD MRCVS, Director, Hospital for Small Animals Easter Bush Veterinary Centre, University of Edinburgh. That seminar is highlighted at www.westiefoundation.org. In 2007,

the WFA sponsored the first joint conference of human and veterinary pulmonary researchers and a resulting white paper will soon be published.

The WFA Board has recently approved funds to support a pilot study on stem cell therapy of IPF with Dr. Richard Vulliet. We are interested in determining the

incidence of IPF in Westies. If you have had, or have a Westie affected with IPF, please notify us through health@westiefoundation.org.

The following articles by Dr. Richard Vulliet, UC Davis and Dr. Liz Rozanski, Tufts University, explain Fibrotic Lung Disease and hopes for new treatment.

In the following articles, please remember that there are several terms for Pulmonary Fibrosis. Idiopathic Pulmonary Fibrosis, Westie Lung Disease, Fibrosing Lung Disease, IPF, etc. all represent the same condition in both humans and dogs.

Westie IPF: What is it? and What can be done about it?

Richard Vulliet, PhD, DVM and Pamela Rosman

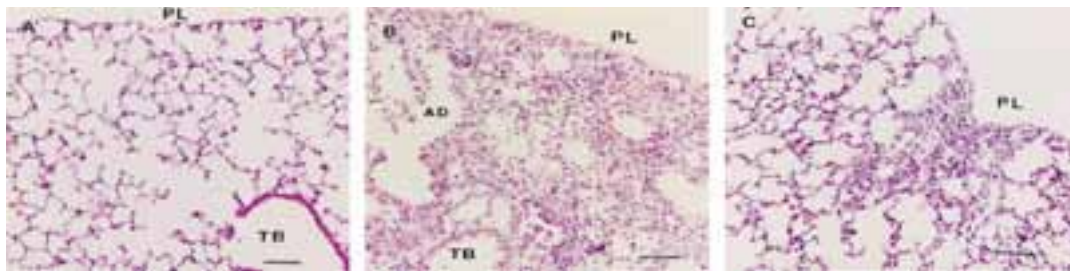
Many who are new to the joys of owning a Westie may have heard of IPF—a terminal disease of the lungs that occurs infrequently in WHWTs and humans. IPF stands for “idiopathic pulmonary fibrosis”—does that help? In reverse order: The fibrosis refers to the formation of fibrotic scar tissue. The pulmonary refers to the lungs. Idiopathic means that doctors don’t know why it occurs. So IPF means “scarring of the lungs” for unknown reasons. Lungs can be injured for a variety of reasons, such as excess smoke inhalation or exposure to toxic or pathogenic agents.

Similar to other tissues, the lungs respond to injury by forming scar tissue. However, in IPF, the veterinary medical field knows that the lungs form scar tissue, they just don’t know why it occurs or how to prevent it.

What are the symptoms of IPF? It usually occurs in older dogs with a higher frequency in WHWTs. Usually, the initial presenting signs are a shortness of breath, inability to breathe, poor color, exercise intolerance or more panting than would be expected. These same signs occur in heart failure, so many times, IPF-affected dogs are first

referred to a cardiologist for a cardio work-up. Once the cardiovascular system checks out as normal, then the vet digs further and finds signs of respiratory insufficiency. Abnormal lung sounds, decreased blood oxygenation or increased density on radiographs suggest a provisional diagnosis of IPF. The diagnosis is confirmed with CT scanning.

In the photos of lung tissue, on the left is normal lung tissue. Note how



left photo - normal lung, middle photo - lung with respiratory toxin damage, right photo - lung affected by respiratory toxin, later treated with bone stem cells. From OrtizPhimney et al. PNAS 100: 8407-11, 2003

open and airy (lacy?) the tissue is. The white spaces, called alveoli, are where blood and air exchange oxygen and carbon dioxide. In the center photo is a section of lung from a mouse that was treated with a respiratory toxin. Note how much more pink and purple there is and how more “filled in” the alveoli appear. This is very similar to what IPF lung tissue looks like and it explains why affected dogs are always short of breath. There is very little gas exchange in the affected lungs. In severely affected dogs, the dog may be very pale or blue in color due to low oxygenation and inability of the blood passing

through the lungs to become oxygenated.

What can be done about IPF? Currently, very little for either dogs or humans afflicted with this disease. Many famous people have died of IPF. The Pulmonary Fibrosis Foundation reports that 128,000 Americans may be afflicted with IPF. One famous person to die of IPF was Evel Knievel. In spite of his life of heroics and risk taking, ironically Mr. Knievel succumbed to

chronic IPF. Currently, there are no effective treatments for IPF. However, experiments in mice and other animals suggest

that adult bone marrow stem cells may have the ability to reverse the ravages of IPF. In the right panel is a section of lung from a mouse that was treated with the same toxin as in the center panel, but was later given bone marrow stem cells. Clearly, the alveoli in the right panel are more open with better gas exchange than in the center panel. Based on these studies that have been confirmed in several laboratories, we believe that adult bone marrow stem cells, commonly called mesenchymal stem cells or MSCs, may be beneficial in treating IPF. We are currently recruiting

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Barbara Hand Prints to Donors



WFA is making available to donors three beautiful Westie scenes painted and donated by Barbara Hands. A signed print will be sent to donors contributing \$50. Donors who give \$100 will receive two different scenes. Those who give \$150 will receive one of each of three scenes. These lovely 8x8 signed, numbered prints would make beautiful additions to any Westie lover's collection. At the same time your donation goes directly to improving Westie health.

You can contribute by either sending us a check or by charging it to your credit card via PayPal at www.westiefoundation.org. If you want to send a check, make it payable to the Westie Foundation of America, and send it to:

Westie Foundation of America, Inc.
c/o Gary Sackett, Donor Manager
16813 Wood Song Ct.
Riverside, CA 92504

(while quantities last)

(Westie IPF continued from page 3)

Westies with IPF to test if dog MSCs will be beneficial in treating Westie IPF. If you have an affected dog or suspect that you have an affected dog, please contact Dr. Vulliet at regenavetlabs@gmail.com or call 530-756-0459 for more information about our project. Although we are located in northern California, most affected dogs can be treated at their local vets using a standard protocol. Any improvement in this currently terminal disease will be beneficial to your dog, his breed and ultimately, humans with this awful disease. Working together, we can hopefully develop a treatment for IPF that will benefit all Westies.

CONGRATULATIONS!

The Westie Foundation congratulates Dr. Knapp and her team of researchers at Purdue! The efforts of that team, with the support of the AKC Canine Health Foundation, the Scottish Terrier Club of America's Health Trust Fund, and the Westie Foundation have resulted in finding new treatment options for Transitional Cell Carcinoma. (See full report starting on page 10) The next goal is determining how to identify predisposed dogs to eliminate the need of treatment. Although research is usually slow and frustrating, patience and perseverance have been rewarded.

We hope more victories are ahead.



Canine Pulmonary Fibrosis

by Dr. Liz Rozanski

Pulmonary fibrosis is a condition that is being recognized with increasing frequency in dogs. The West Highland White Terriers and other terriers are the most commonly affected although any breed may develop pulmonary fibrosis. Pulmonary fibrosis belongs to a group of diseases referred to as interstitial lung disease, which is global term for the specific part of the lung that is affected. Respiratory diseases in general are divided into upper airway disease, which includes laryngeal paralysis and brachycephalic airway syndrome; lower airway disease, which includes chronic bronchitis; alveolar disease, which includes severe pneumonia and congestive heart failure; pleural space disease, which includes pyothorax (infected fluid) and pneumothorax (air) and the interstitial disease, of which pulmonary fibrosis is the most common.

Fibrosis is scar tissue, and in pulmonary fibrosis the normal lung tissue is replaced by scar tissue, which leaves very little normal lung capacity for daily activities. The underlying cause at this point is unclear, although it is thought to represent inappropriate healing following lung injury. The specific challenge is that pulmonary fibrosis is rarely if ever recognized at an early stage, where there may be more potential to reverse or slow the condition. In people, it is recognized to run in families, and certainly a genetic component is suspected in dogs as well. The similarities between pulmonary fibrosis in dogs and people are potentially exciting as the development of beneficial therapies may be applied to both species.

Clinical signs of pulmonary fibrosis include exercise intolerance, rapid respiratory rate and ultimately respiratory distress. Affected dogs are often initially suspected of having either congestive heart failure or pneumonia, and the pulmonary fibrosis only detected after failure to improve following therapy for either of those more common conditions.

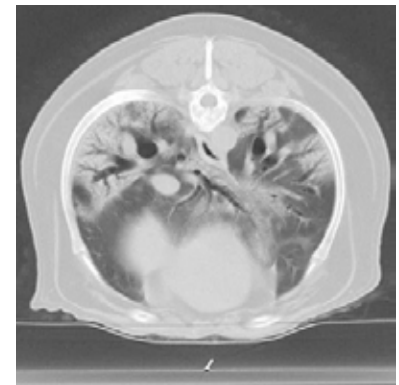
Diagnosis of pulmonary fibrosis in dogs requires a degree of suspicion. The clinical signs at first are often subtle and may be attributed to normal aging rather than appreciated as abnormal. In fact, in one study, owners had noticed abnormalities for up to a year before diagnosis. Physical examination findings classically include the presence of very loud "crackles" upon auscultation of the chest as well as a rapid respiratory rate and effort. Dogs may also have a heart murmur. Chest x-rays usually show a heavy interstitial pattern without signs of infection or heart failure. Chronic bronchitis is another consideration in these dogs, although dogs with chronic bronchitis usually have a pronounced cough. Further diagnostic testing may include bronchoscopy and cytological evaluation of the airways, or computed tomography (CT) of the chest. Bronchoscopy is particularly useful to exclude chronic bronchitis. CT scanning of the chest is considered the gold standard in people, and on-going work is occurring in dogs to try to determine the utility of this imaging modality in dogs as well.

Treatment to date has not been very rewarding, although some dogs appear to stabilize for some time on

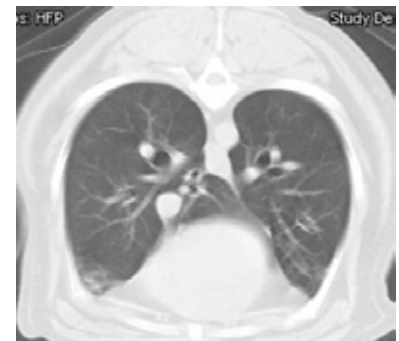
prednisone therapy as well as with treatment for other conditions, such as infection or Cushing's disease. Dogs often develop pulmonary hypertension, which is high blood pressure in the lungs due to the scar tissue in the lung tissue. These dogs may be treated with Viagra® (sildenafil) to help lower the lung pressures. A number of therapies are in clinical trials in people and these may be applicable to dogs. The average survival time following diagnosis is about a year, although some dogs live much longer, while others succumb to respiratory failure shortly after diagnosis.

Examples of CT scans from a dog with pulmonary fibrosis (panel A) and a normal dog (panel B).

Panel A.



Panel B.



WFA President Loses Mom, Dog to Same Fatal Lung Disease

Canine Research May Help Cure Humans, and Vice Versa

By Teresa Barnes, Vice-President Communication, WFA

New research in West Highland Terriers may save dogs and other animals as well as humans suffering from a fatal lung disease. The little known lung disease called Pulmonary Fibrosis (PF) (also referred to as Idiopathic Pulmonary Fibrosis or IPF) currently has no treatments and no cure and claims canine and human life rapidly and sometimes with little warning.

Westie Foundation of America (WFA) President Bebe Pinter understands the human and canine perspective as well as most anyone. Ironically, she lost her mother to the disease and also her West Highland Terrier dog to it - just a few years apart. She has become one of the first supporters of the collaborative canine and human research. When "I lost my mother and my dog, I really didn't understand it very well," Pinter said.

Pinter's mother, Florence Brooks, died at 71 after suffering for a few years with the disease that is characterized by rapid and

irreversible scarring in the lungs. Rowdy died at 10 years of age after suffering for just three months.



Pinter turned her grief into action. "I am now dedicated to eradicating the disease and educating others," she said.

Until Pinter became president of WFA in 2009, she was unaware that the deaths of her loved ones could have been similar diseases. Their symptoms were the same - shortness of breath, especially on

exertion and coughing. She found out that not only were the two similar but that Rowdy's death may actually help scientists better understand why her mother died, as well and what they can do to stop the disease in both animals and humans. "At first, I didn't connect the two. It was only when I became involved in the WFA and met PF experts. It was like a light bulb came on," Pinter said.

Human PF researcher Jesse Roman, MD, professor and Chairman of the Department of Medicine at University of Louisville, is working to find treatments for humans and animals - also referred to as comparative biology.

It is being used successfully in the study of bladder cancer, for example, in humans and canines. Dr. Roman and other scientists including veterinarians, are looking at Westies to see if they may hold the key to unlocking the answers to the human version of the disease as well as the canine version.

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(Lose Mom, Dog continued from page 6)

“Dogs affected by lung fibrosis are similar to people in that they suffer - they have cough, shortness of breath, exercise intolerance, and they die early. Nothing is given to the animals to induce the disease - they develop it naturally just like humans. Therefore, they represent another group of victims with lung fibrosis,” Dr. Roman said.

Dr. Roman came upon the connection between canine and human PF when Wayne Kompare, president of the WFA at the time, convened a meeting of physicians, researchers, veterinarians, pathologists, and advocacy experts in October of 2009. Afterwards, several attendees developed a working group sponsored by the American Thoracic Society with the intention of developing a document that summarizes the status of work related to lung fibrosis in dogs and other animals and how it relates to that of humans. The resulting document is almost ready for publication (expected later this year) and includes several recommendations for advancing research in the area.

“This type of research should complement ongoing research in this field. We are hopeful that by using a comparative biology approach, this work might accelerate discovery regarding the roots of the disease but, importantly, the development of treatments that reverse, or at least, halt the progression of disease in both humans and animals. Imagine a treatment that reverses fibrosis in both patients with IPF and in animals - I would like to see that happening in my lifetime,” he said.

“Communication is vital to get the word out,” said Pinter. “I know that those that have come to our attention are very dedicated but it is an uphill battle to find funding. The WFA can make funding happen quickly without a lot of red tape. We just need more funds to dedicate to this research. And, since Westies have a shorter life span than humans, they are vital to the research. Studying them will yield faster results than working only with humans.”

The Coalition for Pulmonary Fibrosis (CPF) is interested in the canine/human research and was a participant in the October 2007 meeting of experts. “The work that is being done holds so much promise for our patients and our four-legged friends,” said Mishka Michon, CEO of the CPF. “We are optimistic that through this comparative research, we can save both of them.”

According to Dr. Roman, many drugs used today to treat a number of medical conditions in humans are often used in animals including antibiotics, diuretics, and chemotherapeutic agents, among others. Thus, any advancement in human disease treatment could be translated to veterinary medicine.

Steps must be taken now, Dr. Roman says, to move the research forward quickly. First, he says, there is a need to increase awareness about the condition in veterinary doctors, dog owners, and researchers in general. Second, there is a need to facilitate the interaction and collaboration between these research communities to stimulate multi-disciplinary research. Third,

Roman says, there is a need to further characterize the disease in animals as we have done in humans. “For this, we should establish databases and laboratory and tissue sample repositories to be used by researchers from both communities to test viable hypotheses,” he said. “Finally, as we do in humans, we should consider engaging in well-designed, double blind, placebo-control studies in affected animals that may further work in this field.”

The field cannot move forward without the enthusiastic endorsement and engagement of Westie owners. “Studies in animals cannot be conducted without their approval. As patients, relatives, and friends, we advocate for clinical research in IPF; without it, this condition will continue to afflict humans for many generations to come. I see the same thing happening in animals if we do not embrace work in this area,” he said. “I am an IPF researcher and a dog owner; have been since I was a child. These pets share our space and our lives and when they hurt, there is nothing we wouldn’t do make them better.”

The Westie Foundation of America, Inc. is a nonprofit corporation, recognized by the IRS as a 501 (C) (3) organization. The mission of the Foundation is to provide financial aid and other support for medical research in order to benefit the health and quality of life of West Highland White Terriers; and to further develop and communicate information regarding the health, care, breeding and quality of life of Westies to Westie owners, Westie breeders and veterinarians.



Probiotics in Veterinary Medicine: Can We Prevent Allergies?

By Rosanna Marsella, DVM, DACVD, College of Veterinary Medicine, University of Florida

Probiotics are defined as “living micro-organisms, which upon ingestion in certain numbers exert health benefits beyond inherent basic nutrition.” For bacteria to be called probiotics, several properties need to be demonstrated. They need to be able to withstand the digestion process by the gastric acids and the bile, they need to be able to adhere to intestinal epithelial cells, they need to be able to persist in the digestive tract for long enough to produce antimicrobial agents, modulate the immune responses, and resist technological processing. In most cases, probiotics are strains of gram-positive lactobacilli or bifidobacteria and streptococci.

Great interest exists in the potential benefits of probiotics for the prevention and/or the treatment of allergies in human medicine.^{[1,2]*} The reason for this interest is that allergic diseases are reported to be less frequent in children from rural environments^{[3]*} and this is thought to be due, at least in part, to increased exposure to bacteria and their helpful modulation

of the immune system.^{[4,5]*} This idea has been elaborated into the “hygiene theory” that postulates that a “healthy” dose of bacteria is necessary to properly modulate the immune system and protect us from allergies and autoimmune diseases, both of which have become more



and more common in industrialized countries. This idea has also been applied to veterinary medicine, although the studies are not nearly as numerous as they are in human medicine.

It is important to note that bacteria that are probiotics in one species (e.g., humans) are not necessarily probiotics for another species (e.g., dogs). That is why it is not always possible to apply and use human products on our pets without prior studies. Investigations have been done on a canine probiotic (*Bifidobacterium animalis* strain AHC7) sold in a commercial

formulation for dogs (Iams ProStora[®], Procter & Gamble Pet Care) to demonstrate that it is safe and well tolerated^{[6]*} and useful to treat diarrhea in dogs.^{[7]*}

Another probiotic that has been well studied in humans

(*Lactobacillus rhamnosus* GG) has also been demonstrated to be a probiotic in dogs.^{[8]*} This probiotic specifically was demonstrated to have some protective effects on the development of allergies in

atopic Beagles.^{[9]*} Atopic dermatitis is defined as an allergic skin disease precipitated by environmental factors such as pollens and dust mites. In dogs it is very similar to the eczema in children and this type of allergic skin disease is also becoming quite common in dogs. Affected dogs are very itchy, particularly on the face, feet and ears and they are prone to recurrent infections both in the ears and on their skin. As this disease is becoming common in our pets, affecting the quality of life of dogs and their owners, there is a lot of interest in finding alternative ways to decrease the frequency of this

(Continued on page 9)



chronic and frustrating condition. Interestingly, in dogs, as it is in people, the changed life conditions play an important role in this increase in development of allergies confirming that the increased time spent indoors and the increased exposure to dust mites have a negative effect.^{[10, 11]*}

In the study done on the atopic Beagles the human product Culturelle® was used and the protective effects on the puppies were sustained overtime and demonstrable 3 years after discontinuation of the administration. In that study high doses of Culturelle® were used. The dam was given the probiotic at the dose of 10 Culturelle® capsules (Amerifit Inc., Cromwell, CT) per day (200x10⁹ CFU of LGG), starting at week three of the second pregnancy and continuing throughout lactation. The puppies received 100x10⁹ CFU per day (5 capsules), from three weeks (weaning time) until six months of age and then discontinued. These dogs were exposed to dust mites and various pollens (e.g., ragweed and timothy grass) and their response was compared to a control litter from the same parents that had not been given probiotics. The “probiotics” puppies 3 years later had less allergies than the control puppies showing that the protective effect was not limited to the time in which the probiotics was given but it was a sustained beneficial effect on the immune system.

The timing of probiotics administration has been demonstrated to be crucial to have the maximum protective effect as there is a “window of opportunity” to modulate the immune system.

It seems that once that modulation has occurred, the protective effect is long lasting. The same seems to be true for human medicine where the best use for probiotics is as preventative rather than treatment with the prenatal administration and the choice of probiotics strains as the most important factors to achieve beneficial effects.^{[12,13,14,15]*}

Although much work still needs to be done to fully elucidate the full range of benefits of probiotics for dogs, current evidence suggests that they are well tolerated and they have great potential to enhance the health and immune system as well as protecting toward the development of allergies. Larger studies are needed to confirm these findings in various breeds and under different environmental conditions.

(Commercial products or services mentioned in this article are not endorsed by the Westie Foundation of America, Inc.)

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Transitional Cell Carcinoma: Once Considered Incurable, Now Highly Treatable

By Dr. Deborah Knapp

In many respects, Frankie was a lucky dog. Just a few years ago Frankie's diagnosis of transitional cell carcinoma (TCC) would have been a death sentence. Dogs with this most common type of urinary bladder cancer had a zero chance of survival. Often they were euthanized as soon as they were diagnosed because there was no known treatment for the disease.

TCC develops from the cells that line the bladder. As the cancer grows, it moves into the bladder wall and muscles. In some cases, the tumor obstructs the flow of urine. In others, the cancer eventually spreads to other organs and the lymph nodes. Either way, the prognosis was bleak. That is, until recently.

Fortunately for Frankie and other dogs, times are changing. Thanks to ongoing research supported by grants from the AKC Canine Health Foundation, the past decade has seen great progress in managing TCC. "It's definitely a treatable cancer," says Dr. Deborah Knapp, Director, Purdue Comparative Oncology Program, at Purdue University's School of Veterinary Medicine.

Currently, there are two fairly standard treatments for TCC according to Knapp. One is the use of an intravenous chemotherapy drug, mitoxantrone, along with an oral nonsteroidal anti-inflammatory

drug (NSAID), piroxicam. The other is the use of piroxicam alone, particularly in cases where

However, they tend to cause more side effects so are used less often.



the dog's owner wants to avoid chemotherapy because of cost or other reasons. (The anti-cancer properties of piroxicam were discovered when it was given to dogs with other types of cancer to control their pain, and the cancer went into remission in some cases.) Other chemotherapy drugs, such as carboplatin and cisplatin have also been used successfully in combination with piroxicam.

In Knapp's clinical trials, dogs often try several different drugs. When one drug is no longer effective, another drug is given. With several different treatments now available, Knapp says "there is approximately a 75% chance that we can control or cause regression of the cancer." In other words, the cancer remains stable or shrinks.

Frankie was one of the dogs who benefited from the clinical trials at Purdue. In 2007, Laurie Hoffman of Schererville, Indiana noticed her nine-year-old Scottish Terrier, Frankie, was experiencing frequent and strained urination. While this, along with blood in the urine, can be a symptom of several common problems such as bladder stones, bladder inflammation, or a bladder infection, it also can be a sign of TCC. Says Hoffman, "We immediately had a red flag

go off in our heads, because we knew Scottish Terriers have a high incidence of bladder cancer." An ultrasound indicated a large mass in Frankie's bladder, and a biopsy confirmed the diagnosis of TCC.

During the biopsy at Purdue, a substantial portion of the tumor was removed. As with most cases of TCC, however, the location of the tumor made complete

(Continued on page 11)



(TCC Highly Treatable continued from page 10)

excision impossible. Hoffman's next step was to enroll Frankie in a clinical trial at Purdue where Frankie received mitomycin C, an investigational drug, administered directly into his bladder through a catheter. The drug stayed in the bladder for an hour and was then removed through the catheter.

This intravesical method delivered a concentrated amount of the mitomycin C directly to the tumor and also reduced the risk of side effects such as those that often accompany intravenous chemotherapy. Indeed, Frankie had absolutely no side effects according to Hoffman. "He would sleep in the car on our [hour and a half] ride home and would then be hungry for a big meal!!!!"

That's not to say this treatment has no risks. While Frankie and many other dogs in the research study did well on the intravesical therapy, with roughly half the dogs having remission of their cancer and few side effects, a couple of dogs weren't so lucky. In those cases the drug didn't remain in the bladder. Instead, it traveled throughout the dogs' bodies causing side effects similar to the severe toxic reactions that can result from intravenous chemotherapy. According to Knapp, researchers don't know which dogs will be affected this way. Consequently, intravesical mitomycin C therapy remains under study, but may be used in dogs who don't respond to standard treatments.

Frankie participated in the Purdue study for 10 months. During that time, he had good quality of life. According to Hoffman, "Frankie was doing absolutely great; the

tumor was not growing, everything was stable, and he felt perfect."

Then things began to change. Frankie developed intermittent pain in his foot. X-rays revealed nothing, but the problem got worse until Frankie reached a point where he couldn't move his back legs. An MRI found the cancer had spread to Frankie's spine. At that point, Hoffman made the decision to let her beloved Scottie go.

Ten months might not seem like a long time, but compared to a survival rate of zero days, it's easy to see why Hoffman was "very glad we participated and would definitely do it again." Knapp's research has led to significant strides in treating TCC.

And drug therapy isn't the only area seeing progress. With support from the AKC Canine Health Foundation, Knapp and the Purdue researchers have been studying both genetic and environmental factors to determine their roles in TCC. Both are important.

Researchers suspect there are genetic factors at work in TCC because certain breeds, such as Scottish Terriers, West Highland White Terriers, Shetland Sheepdogs, Beagles and Wire Hair Fox Terriers are much more likely than others to develop the disease. Knapp says they are making progress in this area and "are much closer to finding the actual gene" associated



with TCC. With this information, they expect to develop strategies for detecting the disease earlier when it may be more responsive to treatment.

Environmental factors play a role, too. According to Knapp, dogs at greatest risk of developing TCC are those that are both genetically predisposed to the cancer and exposed to harmful environmental factors such as lawn chemicals and insecticides. At the other end of the spectrum, studies have identified helpful environmental factors, too. One such study of Scottish Terriers showed dogs who ate vegetables at least three times a week had a 70% decrease in the risk of developing TCC.

Knapp sums up the progress very well: "We have reached a point where we consider TCC very treatable and where we expect most dogs to have several months to over a year of very good life. We expect a small percentage to live multiple years, and a few lucky dogs to be cured." And the future looks even brighter. With the potential discoveries in Purdue's current research on TCC, we can expect to see even more improvements in diagnosis and treatment.



A Testimonial From a Westie Foundation Supporter

(printed with permission from Camille Vassari)

I am so happy to see that Dr. Knapp at Purdue University School of Veterinary Medicine was recognized for her work and all those associated. The article was very informative and gave many of us who suffered through this disease with our beloved Westie, or any breed for that matter, great hope.

I organized a dog walk after losing my Westie, Mickey, to this cancer. This will be the 5th Annual Mickey's Mile Dog Walk for Canine Cancer Research. **All the proceeds** are sent to The Purdue Foundation to aid the research of Dr. Knapp and her team. I did my own research after Mickey passed away and wanted to make a donation in his memory. That did not seem to be enough for the love he gave to us and all the joy he brought to our family. So with the help of the internet I contacted many involved in cancer research and was referred to Purdue. I was told "they are doing very impressive work in this field." And so I decided to do a walk in Mickey's memory. I was not a business, corporation, we were his family and this was our way to continue to care for him. I wanted to share this story with you and hope you will visit our website-www.mickeysmile.net and see the walks we have taken for Mickey's everywhere.

I love this breed and we have welcomed our little Jasper into our family. Once a Westie touches your heart your life is never the same...just better!!

If you would be able to send me about 250 (for all the participants of this years walk) I would be happy to distribute the Westie Wellness Spring 2011 so that others can be informed and help the Westie Foundation as well.

Thank you for all you do for this very special breed. I hope to hear from you soon. I hope you enjoy the walk through our website and please pass it on for others to view. We are also on facebook - Mickey's Mile.

Best regards,

Camille Vassari

Last Chance to Participate in the 2011 WFA RAFFLE to Benefit West Highland White Terriers

\$10 Per Chance – Amish Quilt or iPad - Your check must be received no later than September 30, to be eligible for the drawing. Please make your check payable to WFA and send to Kim Smith, 30306 Olympic St., Castaic, CA 91384 (kimsmith9@hotmail.com). Drawing to be held at the West Highland White Terrier Club of America banquet, Friday, October 7, 2011. Thank you!

Name	Address	City/State/Zip	Phone #
_____	_____	_____	_____



2011 Raffle Drawing

Your chance to win 1 of 2 prizes

1. Amish Quilt
2. Apple iPad

\$10 per chance

Drawing to be at Montgomery 2011
Winner need not be present to win
Board, Advisory members and their spouses not eligible to win.

You've Got to See Our Website!!!

www.westiefoundation.org

There is so much to see and learn!

A wonderful presentation entitled, *Skin Dysfunction in the West Highland White Terrier* by Dr. Rosanna Marsella, DVM DACVD, was presented at our national Roving Specialty and is now available in PowerPoint on the website.

Information on the **Canine Health Information Center (CHIC)**, and the health clearances recommended for Westies are listed. Please take time to review the procedures for obtaining these very important health clearances.

Under the Westie Health drop down menu, a new section has been added to include **European Westie Health Surveys**.

Look for the latest progress reports on **grants and proposals** partially funded by the Foundation also under the Westie Health drop down menu.



Check us out on Facebook! Try using the header buttons on the home page to quickly link to important Westie information.

The website committee is always interested in new Westie information which would be appropriate for our site. Please feel free to send suggestions to the address listed below.

Donna Hegstrom, Website Chairperson, Kiloranleawesties@gmail.com



Getting to Know the Foundation Board



**Naomi Brown,
Board Director**

*Westie Foundation of
America, Inc.*

My journey with Westies began in 1996 when I found a little white dog, in very poor condition, wandering a mall parking lot. With no success in finding

his owners, "Toto" became part of our family. There my Westie journey begins. Like potato chips, you can't have just one. A few years later we purchased our first show dog from Nancy Schoch of Windsong Westies.

It was at Montgomery in 1999 that I was introduced to Sue Thomson of Ashgate Kennel in England. The following spring, my late husband, Carl, and I traveled to Sue's home and purchased my first Ashgate girl. Since that time Sue and I have developed a strong friendship and are fortunate to see each other several times a year. I have come to depend on her wealth of knowledge and common sense approach to breeding. I am a member of the West Highland White Terrier Club of England and stay in contact with several members. I was fortunate to travel with Sue to their Special Celebration Centenary Championship Show in June of 2006 in Dumfries, Scotland. Sue honored me by asking that I take her affix as mine: Ashgate U.S. It is with great pride that I use Ashgate U.S. as my kennel name and I strive to breed for health and temperament. Along with being on the Board of the Westie Foundation, I am also a member of the WHWTCA and the WHWTC of New England.

I work full time for the Bristol County District Attorney where I am assigned to the Massachusetts State Police Detective Unit, investigating homicides and cold cases.

For me, breeding Westies is so rewarding. Everyone enjoys different aspects of this sport and my passion

(Continued on page 15)



**Kenneth J. Fodill, Jr.,
Board Director**

*Westie Foundation of
America, Inc.*

I began my first Westie adventure in 1997. Our first Westie female came to us from a backyard breeder. One year after she developed Addison's disease, our vet called us about a neutered male Westie that needed a home. He

came out of a puppy mill. The owners could not deal with him and his terrier personality. He was then added to the family. Watching Daisy suffer was hard on the children especially our daughter. After Daisy passed on, we then started researching breeders and health issues in the breed. Our first show Westie joined the family in 2003.

After our beginnings in Westies we realized we wanted to learn all that we could about the breed and somehow make a difference. As our children moved on to college and out of the nest we were able to devote more time to the dogs. We then realized that the Westies brought us so much joy and happiness. Thus our Westie adventure began. Our Westies now are like our children. At the end of the day they sit of the couch and watch TV with us. Joining local then national clubs, meeting breeders has all added to our knowledge. We are grateful to all of our mentors in this breed.

I am an owner of a mechanical contracting firm in Richmond, Virginia. I have been in the business since 1992. I have been married 30 years in July of 2011 to my high school sweetheart. We have a son, Kenneth. He works for me in the business and someday will take over. Our daughter, Elizabeth works in the insurance business. We are proud grandparents of our son's

(Continued on page 15)



(Naomi Brown continued from page 14)

is breeding. To produce a healthy, well-constructed Westie with good temperament is something that I take very seriously. We are the caretakers of our breed and with this is a tremendous responsibility; from the decision on which dogs to mate, the whelping of the litter, the rearing of healthy puppies, to their evaluation and finally, a difficult task for me . . . the placement of my precious little ones. The Westie Foundation offers a wealth of information on health issues and the well being of our Westies. We need to look carefully at what we are producing and test the health of our breeding stock. The Foundation is always willing to go the extra mile to help.

(Kenneth Fodill continued from page 14)

children, Claire, two and one half and Tucker, one. Our family and dogs are our focus.

I am very honored to be a part of the Westie Foundation. It is my hope that I will continue to grow as a breeder and individual in the Westie community. I respect all that have dedicated countless years and passed on priceless pearls of knowledge to me.

SETTING THE RECORD STRAIGHT

In a thank you to the regional West Highland White Terrier club liaisons that appeared in the Westie Wellness, summer 2011 issue, we inadvertently referred to the liaisons as establishing a two-way communication between regional clubs of the West Highland White Terrier Club of America and the Westie Foundation.

Regional clubs are independent of the WHWTCA. The regional liaisons recognized in our Thank You work on behalf of their individual clubs, not the West Highland White Terrier Club of America.

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FREE EDUCATIONAL SEMINAR

Inherited Eye Disease in Westies

Thursday, October 6, 2011



6:30 PM



Comfort Suites

700 West Uwchlan Ave, Exton, PA 19341

(across from the Hampton Inn on the SW corner of Rt 100 and Rt 113)



New Location!



Dr. Andras M. Komaromy, DrMedVet, PhD will discuss eye diseases and abnormalities known or suspected to be inherited in Westies. Dr. Komaromy will answer questions from the audience. For more information contact Ann Marie Holowathy, 215 345 6333 or aholowathy@msn.com.

New Westie Gifts items will be available at the seminar sales table. Please note there will be no dinner available at the seminar.

A CERF clinic conducted by Dr. Komaromy will be held at Kimberton on Saturday, October 8. To register, contact Nancy Stolsmark, at livlfluv2000@aol.com.



Westie Cartoon Caption Contest

Create the winning caption for this Westie cartoon. Please send your caption to bjpinter@msn.com before November 30, 2011. The winner and runner-up will be announced in the next newsletter with their captions.

Create a Caption for this Cartoon



Copy of original watercolour by Ruth Sutcliffe, England



Winners of Last Cartoon!

WINNING CAPTION

by Cheryl Green

"I'm scared, Mom!!! I think I saw a big black puddy cat."

RUNNER-UP CAPTION

by Dee Carlton

"I need a vacation!!!! I'll go camping and put up a Pup Tent!!!!"



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CERF CLINIC

Saturday, October 8, 2011

(During and Following Sweepstakes Judging)

Kimberton Show Site

The WHWTCA Health Committee will sponsor a CERF eye clinic in conjunction with the club's National Specialty Show. Testing will be performed during and following sweepstakes judging. The cost per Westie is only \$15 for WHWTCA members and \$30 for non-WHWTCA members. A CERF exam is one of the three health clearances needed for Westie health certification by the Canine Health Information Center (the other two are patella exam and hip exam for hip dysplasia and Legg Calves Perthes). Kay McGuire, DVM, Health Committee Chair of the WHWTCA and the WFA is donating her time to give free patella examinations when registered for the CERF examination. Examinations are by appointment. Registration forms can be downloaded at the WHWTCA website.