

# **Bladder Cancer: Remember This Treatment**

Carole Fry Owen

*"My Scottie is having trouble urinating, and there is blood in the urine. Her veterinarian has been treating her for a urinary infection, but she's not getting better. Any ideas?"*

*Judy and Alex Falcon, Palos Park, IL.*

"Transitional cell carcinoma of the bladder is my best guess" -- "Dr." Owen, the armchair vet, told 10-year-old Tootsie's owners who called yesterday.

I wasn't making a rash, uninformed statement. My old Lucky had identical symptoms five years ago. Her diagnosis was bladder cancer, and she became something of a landmark case in making Scottie owners aware of a new cancer treatment.

This treatment needs even wider exposure, so I hope GSM readers will help. Two days before the Falcons phoned, I had two other calls requesting information on bladder cancer treatment, and two weeks before that still another call. Bladder cancer strikes Scotties often.

The Falcons already suspected cancer, but they had no idea that the risk might be so high for Tootsie. The fact is: the Scottish Terrier has the highest risk of bladder cancer of any purebred dog! And female Scotties have twice as much bladder cancer as male Scotties.

"This dog has been a nurse to all of our family. She has carried us through the worst of times, illnesses and such," said Judy Falcon. If the answer to Tootsie's ultrasound is bladder cancer, Judy and Al do not want to put her through surgery, radiation or conventional chemotherapy

I was delighted to be able to tell them there is a fourth option, one which Scottie owners find can improve quality of life, and, in fact, sometimes extend life-- the good life-- in Scottie bladder cancer patients. Tootsie may have a lot of "nursing" to offer her family yet.

When my Lucky was finally diagnosed, we prepared ourselves for "last rites," thinking Lucky had only weeks to live, Lucky for Lucky and us, our enterprising vet called a Texas A&M veterinary oncologist to inquire about possible treatments. Amazingly, Purdue University had tested a drug that gave excellent results against transitional cell carcinoma of the bladder in dogs. The drug was piroxicam, generic form of Feldene® a non-steroidal anti-inflammatory medication used in humans for arthritis.

Lucky lived about a year after beginning piroxicam treatment-- with outstanding quality of life, Five months into treatment I wrote: "Lucky retains her great interest in food, She is active, can still work up a game of soccer. She delights in life and appears in no pain,"

Purdue's studies on piroxicam continued, and results of later research were even more definitive: The Scottish Terrier column in the AKC Gazette, August, 1997, reported: "In a 1994 Purdue report published in the Journal of Veterinary Internal Medicine (volume 3, number 4, pp. 273-278), 34 dogs (including eight Scotties) with inoperable transitional cell carcinoma of the bladder were treated with a daily oral dose of 0.3 mg piroxicam/kg of body weight. At 46 days, in two dogs the tumors were in complete remission, and in four they were in partial remission. The disease was stable in 18 dogs and had progressed in 10. One of the two dogs that was in full remission lived for 10 months; the other lived for two years. The median survival of all dogs was 181 days."

Heather (Ch. Windsor's Misty Heather) owned by Margaret Plumb, Laramie, WY, was a Feldene® wonderdog. Colorado State University veterinarians diagnosed Heather's bladder cancer in March 1994, and gave her only two

months to live. "Heather responded miraculously to the Feldene® treatment, and we were blessed with 2 and a half more years," says Margaret.

"Heather was still going for one-half mile to one-mile walks a week ago, without my ever pulling her lead, and she ate with a strong appetite the night of Nov. 18," Margaret wrote CSU vets Nov. 19, 1996, the day Heather died. "I do not want you to think that I struggled for two and one-half years to keep a canine invalid alive. Heather enjoyed all of the activities of the younger, stronger dogs until practically the end. Heather always had an excellent appetite and a particular passion for cooked eggs, any style. Heather would chase off an errant squirrel, cat, or dog that might encroach upon her property, and had an endearingly pompous attitude when patrolling her territory."

Margaret sent me a photo taken the afternoon Heather died. I agree with her. "It shows her clear eyes, her nicely fleshed body, her beautiful, healthy black coat." In the care after the photo session, Heather gave a yelp and fell across Margaret's knee. Her vet concluded she died of a heart attack.

Barbara Albright (Chester, NH) sings the praises of piroxicam treatment for her Mack, too. He was diagnosed with bladder cancer in late 1996 at eight years old, and still is doing well today. Mac's ultrasound showed tumors occupying almost half of Mack's bladder with the worst around the "neck opening."

"After about one week of daily dosage," wrote Barbara, "I saw more improvement, almost no repeated straining, only occasional blood, good amounts passed, and most importantly, a dog that felt better, with more energy and mingling back with the others, barking and dancing!"

A year into treatment Barbara wrote, "He looks great! He acts great!" Then last April: "He is slowing down, but still manages to dance and bark up a storm!" In June: "Mack is 18 months (into treatment) now and looks/acts pretty darn good." In August: "Mack's 10-year birthday is today, Aug. 16, 1998! Two very short years ago we thought we would not have him today. We made a big fuss this morning, and he was dancing and merrily wagging his tail although I'm sure he didn't quite know what we thought was so special!"

"All his recent bloodwork showed very little kidney/liver changes: actually all indicated fine health. He sometimes doesn't make it out the door to urinate, but, heck, it is still coming out. His appetite, stools, etc., are great! He doesn't run as often as he was, and will get tired, panting when he does exert himself. He sure musters up plenty of barks all the time, and is the first one to hear a potato chip bag open."

Out of curiosity, Barbara asked for an ultrasound this fall. It showed the tumors have merged around the outside of Mack's bladder, and some lymph node involvement. But Mack is in no apparent pain, and "he can still make a big puddle." Living in New Hampshire, Barb finds snow a help in tracking blood in Mack's urine. When diagnosed, Mack had been showing tea-colored urine. Barbara suggests owners whose dogs don't eliminate on concrete or snow occasionally dab urine spots with a white paper towel to check color.

Piroxicam or Feldene® can have severe gastrointestinal side effects, and should be used only under a veterinarian's direction. Both Heather and Mack received higher than the recommended doses of piroxicam, given jointly with low doses of the antibiotic amoxicillin. Heather took 10 mg Feldene® every other day, and Mack receives 5 mg daily.

Barbara joins dog owners who use nutritional therapies in their cancer patients. In addition to piroxicam, Mack receives Vitamin C and supplements including Coenzyme Q10 and sometimes milk thistle. Barbara believes Vitamin C is a major factor in Mack's continued good condition: "I have run out of vitamin C several times, and have noticed more blood in the urine."

Another nutritional strategy could be garlic. Research (Cancer, vol 79: pp. 1987-1994, 1997) shows garlic as a possible new effective treatment for transitional cell carcinoma of the bladder. Mice treated with garlic orally had significant reductions in both tumor volume and mortality. Garlic is worth a try for dogs with bladder cancer. Aged garlic tablets (like Kyolic®) do not promote offensive odor and are easy to give.

Some dog owners also opt for cancer diets which, in general, are low carbohydrate, high fat, and high quality protein. To customize a diet for your dog with cancer, contact a holistic veterinarian, or read "Eating Right to Fight Cancer" in *The Whole Dog Journal*, December, 1998.

Epidemiologist Dr. Howard Hayes wrote a comprehensive article on cancer in Scotties for the 1986 Scottish Terrier Club of America Handbook. He states that tobacco usage and occupational chemical exposures are known risk factors for human bladder cancer. Dogs Dr. Hayes studied which lived in geographical areas with greater industrial activity also showed an increased frequency of bladder cancer compared with other cancers. He suggests that the pet dog (yes, our Scottish Terrier) is a sentinel model for this type of environmentally related cancer.

Since Scotties have the greatest risk for bladder cancer of any purebred dog, Dr. Hayes speculates they may be especially sensitive to environmental bladder carcinogens. The fact that female dogs have twice as much bladder cancer as males may be because males' "scent marking" sends urine-borne carcinogens through their bladders quicker.

A strategy to reduce risk of bladder cancer in Scotties should include reduced exposure to possible urine-borne carcinogens. Pre-emergent weed killers, herbicides, fertilizers and pesticides you use in the backyard; carpet cleaners inside your house; residue from pest extermination; frequent use of anti-flea products; second-hand tobacco smoke; and even drinking water and preservatives in dog food may pose dangers. Lower your Scotties' toxic burden, and you may reduce the risk of bladder cancer, and other cancers! Remember: our Scotties live on the ground and on the floor—ground zero for many possible carcinogens.

Chronic inflammatory conditions and chronic allergies may increase risk of various cancers. With Scotties' high incidence of bladder cancer, it is important to diagnose, treat and cure urinary tract infections in a timely manner.

Bonnie Lamphear, Clearwater, FL., whose Scottie Sonny has just started Feldene® treatment, cautions owners to check their prescriptions carefully. Her vet phoned a prescription for Feldene®. The pharmacy misunderstood and filled it with Seldane® which is an antihistamine. Bonnie discovered quite by accident she was giving Sonny the wrong medicine.

Bonnie also emphasizes the importance of expert ultrasound/ sonography evaluation. If your Scottie is having strained urination, bloody urine and chronic urinary infections, and if conventional treatment is going nowhere, insist on ultrasound. It is the non-invasive diagnostic tool of choice.

You're wondering about Tootsie? Yes, she does have bladder cancer. The specialist who did Tootsie's ultrasound was quite insistent he would not find bladder cancer. He admitted, "I was wrong." The Falcons have started her on piroxicam.

Knowledge that Scotties are the #1 breed affected by transitional cell carcinoma of the bladder, and that bladder cancer is the #2 cancer affecting Scotties, gives you, the Scottie owner, more information than 95% of veterinarians have. You are the person with breed specific information, and a wise veterinarian will use your knowledge when looking for an illusive diagnosis.

The good news: I predict Tootsie has months, maybe years, to "nurse" her family. Check this column for future updates on Tootsie!

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## References

Howard M, Hayes, Jr., D.V.M, "Hospital Prevalence of Cancer in the Scottish Terrier; *STCA Handbook*, 1986, pp. 158- 167.

Source: Great Scot Magazine, Jan/Feb 1999, pages 28-29, 34.