Proactive Breeders Improve Outcomes for Dogs with Ocular Diseases

Experience can be helpful when it comes to recognizing and managing ocular diseases in Shih Tzus. Just ask Lila Pontius of D’Lilas Shih Tzu in Bunnell, Fla. After 10 years as a breeder, she has seen enough to know readily when her dogs are not seeing all they should be.

When Pontius took “Tango,” a 13-year-old male, to the veterinarian late last year, the breeder was gravely concerned. She’d cared for the dog through melanoma and a related surgery to remove part of his jaw in early 2009. By the end of last year, Tango was holding his right eye closed and was clearly in pain. He wouldn’t follow her around the house anymore, preferring only to lie on his dog bed.

“Our veterinarian determined Tango had a type of corneal ulcer that is common in older dogs,” Pontius says. “I was afraid he would have to have his eye removed, but the veterinarian was able to debride, or scrape away the old tissue, on Tango’s corneal epithelium.”

It took more than four months of once- to twice-weekly visits to the veterinarian, three debridements, and application of an ointment to Tango’s eye every four hours, including at night, to resolve the issue. “To put the medicine in his eyes was challenging,” Pontius says. “He was in so much pain, and resisted every time we tried to apply the ointment to his eye. He became less resistant over time, and we knew he was feeling better.”

According to experts, brachycephalic breeds like the Shih Tzu, with their broad, short faces, are more susceptible to corneal ulcers, partly because of their prominent eyes. “Ulcers are commonly caused by trauma to the corneal surface, whether from an external source or self-inflicted,” says Kathleen Barrie, D.V.M., DACVO, professor of comparative ophthalmology at the University of Florida College of Veterinary Medicine.

“Unfortunately, Shih Tzus often need to be seen in a hospital for corneal ulcers. Their corneal sensitivity is lower than the average dog, so a breeder may not know the Shih Tzu has an ulcer until it becomes much more serious. Any ulcer in a Shih Tzu should never be taken lightly. If an ulcer goes untreated, it can lead to rupture of the cornea and loss of vision. It is always considered serious until proven otherwise. Identifying the cause of the ulcer or any contributing factors such as distichiasis, or extra eyelashes, or a poor blink response requires a thorough ocular exam.”

Depending on severity, treatment may be necessary with a variety of topical and systemic medications, such as an anti-inflammatory, analgesic or antibiotic. “In severe or progressive cases, reconstructive surgery, including grafting procedures, may be needed,” says Cecil Moore, D.V.M., DACVO, professor of ophthalmology at the University of Missouri College of Veterinary Medicine. “If left untreated, the consequences could be severe tissue scarring, loss of vision, shrinkage and possibly removal of the eye.”

Distichiasis & Dry Eye

Pontius also went through eye problems with “Daisy,” an 11-year-old companion dog. A few years ago the Shih Tzu suffered from distichiasis, a condition in which an extra row of eyelashes grows out of the base of the melobomian gland, the oil gland on the eyelid margin. Taking her veterinarian’s advice, she let Daisy’s condition resolve itself, which it did in a few weeks. However, not all dogs experience such a relatively mild degree of distichiasis.

According to the Canine Eye Registration Foundation (CERF), approximately 20 percent of Shih Tzus screened for eye diseases are affected with distichiasis. Depending on the size, location and number of distichia, these extra eyelashes may not be visible by direct inspection. A veterinarian or veterinary specialist uses magnification combined with a bright focal light source, such as a slit-lamp biomicroscope, to evaluate distichia.

“A few extra eyelashes may not cause any ocular disease,” Barrie says, “yet one very stiff distichia directed toward the cornea can cause inflammation, known as chronic keratitis, and ulcerations.”

Signs of distichiasis vary, ranging from asymptomatic cases to those involving mild tearing and mucus accumulation. Severe signs are marked by squinting and pain associated with a corneal ulcer. Disease management includes prescriptive ointments or, in serious cases, surgical removal of the extra row of eyelashes through electroepilation (electric current) or cryoepilation (freezing).

“For the surgical options, sedation or anesthesia is needed,” Moore says. “Since specialized equipment, such as a surgical microscope, may also be needed, it is best to seek treatment from a veterinary specialist. If this condition is not treated, it can result in pain and a persistent or recurrent corneal ulceration.”

After overcoming distichiasis, Daisy developed a cyst on the underside of her right eyelid. The cyst was removed, but this caused dry eye. “Surgery to remove the cyst interfered with the tear gland and resulted in Daisy’s right eye not producing enough tears,” Pontius says.
Ocular Diseases

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Pontius says. "Now, I routinely admin- ister lubricating drops to her eye and carefully monitor her eye. If I see her eye is getting red or is running, or if she is squinting or holding her eye closed, I take her to the veterinarian right away."

Dry eye, or keratoconjunctivitis sicca (KCS), is believed to affect about 1 per- cent of Shih Tzus. Though the breed is not considered at high risk for dry eye, anatomy plays a role. "Predispo- sition in pug-nosed or brachycephalic dogs is felt to be related largely to their relatively exposed eyes," says Moore. "They require more tear secretions to coat such prominent eyes."

Dry eye stems from insufficient production of the aqueous portion of the tear film. This part of tears is produced by the lacrimal (tear) gland and the gland of the third eyelid, which dogs have as extra protection for the surface of the eye. Lack of tears caus- es a drying out of the eye’s surface structures. This can lead to ocular pain, corneal ulcerations, chronic keratitis and chronic conjunctivitis, which is swelling and infection of the membrane lining the eyelids (conjunctiva). Dry eye can eventually lead to loss of vision.

Dry eye also can be caused by certain prescription drugs, acute or chronic infections, hormonal abnor- malities (hypothyroidism) or systemic disease. Applying lubricating drops to the eye can help prevent signs of dry eye. Selective breeding for dogs with good eyelid and facial conformation, such as good ability to blink effec- tively, is important in reducing the incidence of dry eye. Early surgical correction of third eyelid gland pro- lapses, removal of chronic irritants such as abnormal hairs, and avoidance of certain medications can also help avoid development of dry eye.

If there is evidence of chronic keratitis, ulcers or poor blink response, surgery can be performed to help prevent further exposure. "The procedure used at the University of Florida is a modified medial cantho- plasty," Barrie says. "This not only cuts down on exposure, but can rid the dog of aberrant hairs often seen in the medial canthus, or corners of the eyes."

Tear Staining & Entropion

Carlene Snyder, chairwoman of the American Shih Tzu Club’s Health, Education and Research Committee, has bred one litter of Shih Tzu puppies

ENTROPION IS AN EYE DISORDER THAT AFFECTS ABOUT 5 PERCENT OF SHIH TZUS. MOST CASES ARE DUE TO A DOG’S FACIAL AND EYELID CONFORMATION. SIGNS OF MILD ENTROPION INCLUDE EXCESSIVE TEARING, SQUINTING, REDNESS AND FACIAL RUBBING. IN MORE SEVERE CASES, THERE CAN BE IRRITATION OF THE CORNEA THAT PRODUCES KERATITIS OR ULCERATION.

under the Carling prefix nearly every year for three decades. Like Pontius, she has experienced tear staining and says regular grooming can be helpful. "I had been involved in Cocker Spaniels and Poodles before Shih Tzus, and when I got started with the breed, I didn’t realize how much work was involved in keeping Shih Tzus’ faces clean," Snyder says. "For those who exhibit at dog shows, a Shih Tzu’s face requires daily cleaning. I advise people who own Shih Tzus as com- panions to keep the dog’s facial hair cut in a ‘puppy cut,’ so there is not as much hair to possibly irritate the dog’s eyes and cause more tears."

Tear staining, also known as epiphora, may be due to excessive tearing or a problem with drainage from the eye. Tear staining is most noticeable in dogs with white facial hair. Inanimate pigments in tear fluid darken the hair around the eye, thus it is highly visible contrasted against the dog’s white hair.

"Tear staining is often a major concern for show dogs because of the unsightly appearance, but it can also indicate lid abnormalities or ocular disease," says Barrie. "A small amount of tear staining is normal, but in brachycephalic breeds, it can indicate an anatomical defect." Among the anatomical defects that could cause tear staining are medial entropion, or the rolling in of the inside corner of the lid; hairy caruncle, or abnormal hair follicles at the base of the third lid; or a lack of an opening, known as atresia of lacrimal puncta. If tear staining is severe or if there is corneal disease associated with the condition, surgical correction is recommended.

Entropion is an eye disorder that affects about 5 percent of Shih Tzus. Most cases are due to a dog’s facial and eyelid conformation. Signs of mild entropion include excessive tearing, squinting, redness and facial rubbing. In more severe cases, there can be irritation of the cornea that produces keratitis or ulceration.

"Surgery is the definitive method in treatment of entropion," Moore says. "Breeders should discuss the matter with their primary care vet- erinarian who, when appropriate, may consult or refer to a specialist. In general, because of concerns about a number of possible heritable conditions, I would emphasize the importance of screening all breeding animals for genetic eye diseases by a board-certified veterinary ophthal- mologist."

Having consulted a veterinary ophthalmologist for Daisy and Tango, Pontius says both have fared well, regaining strong ocular health and resuming their normal behaviors. "Daisy’s eyes look good, though I stay alert for signs of difficulty," she says. "Tango’s problems also are resolved, and he is back to following me all around the house. Looking at his eyes, you wouldn’t be able to tell he ever had any trouble."

Purina appreciates the support of the American Shih Tzu Club and particularly Carlene Snyder, chair- woman of the Health, Education and Research Committee, in help- ing to identify topics for the Purina Pro Club Shih Tzu Update newsletter.

Want to Reach the Editor?

Have comments about Purina Pro Club Update? Send them to us at: Purina Pro Club Update, c/o Editor, Nestlé Purina PetCare, 2T Checkerdock Square, St. Louis, MO 63164 or via e-mail at today’sbreeder@purina.com.

Send Us Your Questions

Have questions about your Purina Points or how to redeem weight cir- cles for rewards and rebate checks? Contact Purina Pro Club at (877) PRO- CLUB, or (877) 776-2582, between 7 a.m and 5 p.m. CST Monday through Friday. You also may visit www.proclub.com to review and redeem Purina Points.
**Pro Plan Selects Natural Dog Food Is Made Without Corn, Soy or Wheat**

Purina Pro Plan brand Selects natural dog food will soon offer optimal nutrition formulated without corn, soy or wheat. Pro Plan Selects already is made without added artificial favors, colors or preservatives. The new formulations without corn, soy and wheat are coming in July. New packaging for the six natural dog foods in the Selects portfolio is also coming in July. The new Selects packaging notes the excluded ingredients and promotes the inclusion of real meat as the No. 1 ingredient, whole grains, and egg and pea protein sources. Easy to read and understand, the Selects packaging features the same soulful photographs of purebred dogs that were featured on the original packaging.

The six formulas in the Selects line are:

- **Pro Plan Selects Natural Turkey & Barley Puppy Formula Plus Essential Vitamins and Minerals**
- **Pro Plan Selects Natural Turkey & Barley Adult Formula Plus Essential Vitamins and Minerals**
- **Pro Plan Selects Natural Turkey & Barley Senior Formula Plus Essential Vitamins and Minerals**
- **Pro Plan Selects Natural Chicken & Brown Rice Adult Formula Plus Essential Vitamins and Minerals**
- **Pro Plan Selects Natural Salmon & Brown Rice Adult Formula Plus Essential Vitamins and Minerals**
- **Pro Plan Selects Natural Beef & Barley Adult Formula Plus Essential Vitamins and Minerals**

Offering complete and balanced nutrition for each specified life stage, Pro Plan Selects contains nutrients to help support a dog’s immune and digestive systems and promote healthy skin and coat. The omega-3 fatty acids DHA (docosahexaenoic acid) and EPA (eicosapentaenoic acid), combined with natural sources of glucosamine, help support healthy cartilage and joints. Pro Plan Selects contain the easily absorbed chelated minerals zinc, copper and manganese. Chelated minerals are bonded to an amino acid, making them easy to digest and be used by the body.

**Purina Event Center Soon to Open at Purina Farms**

The dog fancy will soon have a new venue for holding dog shows, agility and obedience trials when the world-class Purina Event Center opens in September at Gray Summit, Mo. Construction of the multimillion-dollar indoor facility will be completed this summer ahead of schedule, says Director Brock Fitzgerald.

Events already are being booked. National Specialties scheduled for this fall include the Full Club of America, Ibizan Hound Club of the United States, and the Border Collie Society of America. All-breed dog shows include the Three Rivers Kennel Club of Missouri and the Gateway Cluster. The Doberman Pinscher Club of St. Louis Specialty Show is also scheduled.

The United Kennel Club (UKC) has announced a new event, the UKC Gateway Nationals, which will be held Oct. 29 to 31 and include conformation and dock jumping, with agility, obedience and rally competitions planned for the future. The United Flyball League International is planning to hold its Tournament of Champions Nov. 12 to 14. The 45,000-square-foot main exhibition hall and the adjoining 13,500-square-foot benching and grooming area were designed to provide comfort and convenience for exhibitors and guests. Amenities include: 158 grooming stations with electrical access; six stainless steel dog bathing tubs with easy access ramps; skid-resistant, coated-concrete flooring in the grooming area; special padded sport flooring; high-efficiency fluorescent lighting that shows the true colors of dogs’ coats; free wireless Internet service; several drop-off entrances for unloading grooming supplies and equipment; and 24-hour security.

For more information, visit the Purina Farms’ Web site at www.purinafarms.com. To inquire about reservations, you may call 888-688-PETS, or 888-688-7387, or send an e-mail to Brock.Fitzgerald@Brock.Fitzgerald@purina.nestle.com.

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<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Location</th>
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<tr>
<td>Northeastern Brace Beagle Federation</td>
<td>May 17 to 21</td>
<td>Hunlock Creek, PA</td>
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<tr>
<td>PKC (Professional Kennel Club) Walker Days</td>
<td>May 13 to 15</td>
<td>McAlester, OK</td>
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<tr>
<td>Purina Labrador Retriever Awards</td>
<td>May 21</td>
<td>Salt Lake City, UT</td>
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<tr>
<td>Arkansas State Championship (UKC Coonhound)</td>
<td>May 28 to 29</td>
<td>Imboden, AR</td>
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<td>Ducks Unlimited Sporting Exposition</td>
<td>May 28 to 30</td>
<td>Grapevine, TX</td>
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<tr>
<td>American Redbone Days</td>
<td>June 4 to 5</td>
<td>Mishicot, WI</td>
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<tr>
<td>Purina All-Age and Top Shooting Dog Awards</td>
<td>June 4 to 5</td>
<td>Valdosta, GA</td>
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<tr>
<td>Professional Kennel Club (PKC) National</td>
<td>June 10 to 12</td>
<td>Salem, IL</td>
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<tr>
<td>Retriever National Amateur Championship</td>
<td>June 16 to 26</td>
<td>Klamath Falls, OR</td>
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*This table lists some, but not all, upcoming sporting events sponsored by Purina.*
The winner of the 2010 Pro Plan Champions Cup will receive a $10,000 cash prize and a trip for two on next year’s K-9 College Cruise to the Caribbean. Cash prizes also will be awarded to the second, third and fourth place finishers.

“The Pro Plan Champions Cup was introduced 10 years ago to honor those who promote excellence in the sport of purebred dogs through conformation dog shows and to support the dog fancy,” says Ann Viklund, Purina Director of Breeder-Enthusiast Marketing. “We are very excited to expand to a yearlong program that includes all Purina-sponsored all-breed dog shows.”

Previously, the Pro Plan Champions Cup was awarded to the dog earning the most points at three select Purina-sponsored benched dog shows. Now, over 200 all-breed dog shows are included. At the end of 2010, points will be tabulated based on the following:

- Best in Show, 5 points;
- Group One, 4 points;
- Group Two, 3 points;
- Group Three, 2 points; and
- Group Four, 1 point.

The dog earning the most points will win the $10,000 cash prize, K-9 College Cruise and a keepsake Pro Plan Champions Cup trophy. A permanent Pro Plan Champions Cup will be displayed at the new Purina Event Center along with a plaque engraved with the winners’ names. The Event Center opens in September 2010.

Cash prizes will be awarded to the top-placing dogs as follows:

- Second place, $5,000;
- Third place, $2,500; and
- Fourth place, $1,250.

More information about the 2010 Pro Plan Champions Cup, a running tabulation of individual dogs’ points, and a complete list of qualifying shows are available on the Purina Pro Club Web site at www.purinaproclub.com. See the Purina-Sponsored Dog Show calendar (below) for upcoming events that are part of the competition.

The Pro Plan Champions Cup is sponsored by Purina Pro Plan brand dog food.

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<td>American Boxer Club National Specialty</td>
<td>May 9 to 14</td>
<td>Fort Mitchell, KY</td>
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<td>Colonial Rottweiler Specialty</td>
<td>May 11 to 13</td>
<td>Lancaster, PA</td>
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<td>Miami Valley Labrador Retriever Club Specialty</td>
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<td>Hamilton, OH</td>
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<td>Rio Grande Kennel Club Dog Show(^1)</td>
<td>May 14 to 17</td>
<td>Albuquerque, NM</td>
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<td>Atlantic Shore Memorial Cluster(^2)</td>
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<td>Chihuahua National Roving Specialty</td>
<td>June 3 to 6</td>
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<td>Fargo, ND</td>
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<td>Mississippi Valley Kennel Club Dog Show(^4)</td>
<td>June 5 to 6</td>
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<td>Gray Summit, MO</td>
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<td>Flagstaff Kennel Club Dog Show(^5)</td>
<td>June 12 to 13</td>
<td>Flagstaff, AZ</td>
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<td>Rolla Kennel Club Dog Show(^6)</td>
<td>June 19 to 20</td>
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<td>June 22 to 24</td>
<td>Billings, MT</td>
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<td>Central Florida Cluster(^8)</td>
<td>June 24 to 27</td>
<td>Orlando, FL</td>
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\(^1\) This table list some, but not all, upcoming Purina-sponsored dog shows.

\(^2\) Denotes an event that is part of the 2010 Pro Plan Champions Cup competition.