Looking for Answers (ELS) — Part I

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In 1994 Fraya Katz took her bitch, Ariel Pinkrose into her vet's for a section. It was her second litter. She came home unable to breath. Her vet told her "all this foamy stuff was coming out when she was under." He didn't know what it was. Fraya guessed the trachea tube used for anesthesia was too large and had somehow damaged her throat. After the operation, Rosie couldn't breathe without straining. "She couldn't get her air out. She was five years old and this had never happened before!" Fraya then spent the next year going from vet to vet trying to find out what the problem was—and watching Rosie suffer.

"Everywhere! Not one said, 'let's look and see'." Not one opened Rosie's mouth and put in a scope and took a look—until Fraya was referred by her original vet to Cheryl Mehlhaff Schunk DVM, ACVS in Amherst, New Hampshire. The first thing Dr. Schunk did was put in a scope and what she found did not have a name, at least in Norwich—large bubbles of tissue obstructed Rosie's airway. Dr. Schunk told Fraya she would have to operate.

The offending tissue we now know as "Everted Laryngeal Saccules." (ELS) But twelve years ago, in our breed, nobody knew what it was. But they knew in bulldogs. Most commonly affected are the "brachycephalic" breeds, dogs like the English Bulldog, Pug, and Pekingese. Brachycephalic means "short nosed." And these breeds have historically been prone to a host of related breathing issues: elongated soft palate, where the soft palate protrudes into the larynx and interferes with the inspiration of air into the lungs; stenotic nares, nostrils which collapse inward during inhalation; and Everted Laryngeal Saccules, "a condition in which tissue within the airway, just in front of the vocal cords, is pulled into the trachea (windpipe) and partially obstructs airflow." 1

The American College of Veterinary Surgeons maintains a website which explains this further and includes photos. Go to:

www.acvs.org/AnimalOwners/HealthConditions/SmallAnimalTopics/BrachycephalicSyndrome. Symptoms include constant open mouth breathing, noisy breathing, excessive snoring, choking and gagging, and exercise and heat intolerance which can result in cyanosis (blue tinged color of the tongue due to lack of oxygen). Obesity can make all of these symptoms worse.

"Everted laryngeal saccules are small bags of tissue that normally sit in recession just in front of the vocal folds. ...Dogs with compromised airflow through the upper airway must work harder to fill their lungs with air. This decreases the pressure in the upper airway even more and literally pulls the saccules into the airway. When everted, the saccules sit just in front of the opening to the trachea and block the flow of air." 2 The fact is, all dogs have saccules. It's part of their physiology. The question is however, why do they pop out (evert) and obstruct the windpipe—particularly in Norwich Terriers?

Sue Lawrence, BlueWater Norwich and Norfolk Terriers is chairing a committee to research "Upper Airway Syndrome in the Norwich Terrier." She has been collecting pedigrees and histories of affected Norwich and is working with European breeders as well. The Committee, formed in February, is still compiling data. "We would like to hit the 200 mark or at least close to it (all scoped; including those that are unaffected as well as those that have ELS), before we can really come to some relative

conclusions." The aim is to provide information to veterinarians to help diagnose and treat the condition in our breed. The further goal is to provide breeders with the information they need to make intelligent decisions when making matches. Sue states the problem is not limited to any one line or geographic location and will be writing articles on the topic for the next two issues of the NNTC News.

The Committee is working with William E. Schultz, D.V.M. whose veterinary practice is in Okemos, Michigan. Dr. Schultz has to date scoped 54 Norwich Terriers. Of these, 52 have had the saccules. A dismaying statistic! Saccules come in two types: fluid filled and tissue filled and have multiple layers. Dr. Schultz will be giving a seminar in conjunction with the International Kennel Club of Chicago's All Breed show on Saturday, February 24th so mark your calendars.

Watch for this column in the Gazette's February 2007 issue to continue this discussion: find out about our visit to Dr. Schultz in June, the procedure, cost, and results; and also to find out how Ariel Pinkrose's case was resolved. For further information on the study or to participate, please contact: Sue Lawrence at bluwaterterriers.com.

1 ACVS website: www.acvs.org

2 www.dcvets.org/surgical/surgicalairway.htm

- Leandra Little, AKC Gazette Breed Columnist