

Patient	Client
"Desi" Bowles Spayed Female, Canine Breed: Shepherd Mix () Age: 7 Yrs. 1 Mos.	Kathy Bowles 67 Chruchville Rd Cherry Hill, NJ 08034 Phone: (856) 316-6812
VSEC Doctor: Ron Ben-Amotz , DVM, MS, DACVS, DECVS Location: VSEC- Philadelphia	pDVM: Dr. Charles Bell Hospital: Evesham Veterinary Clinic

Diagnosis: Thyroid mass Grade IV/VI heart murmur Cardiac arrhythmia Stridor Abdominal effort when breathing

Weight/TPR: 16.8 kg

Presenting Complaint: Thyroid mass
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History: Desi presents for evaluation of a thyroid mass that was recently diagnosed as a endocrine/neuroendocrine neoplasm. Desi started to have increased respiratory noise back in December 2018. The owner also noted that she had a mass developing on the right side of her neck. She was started on Doxycycline and Prednisone, and the mass did increase in size. Desi continued to have her respiratory signs. She also developed a right head tilt. Thoracic radiographs were then taken and Desi started treatment for bronchitis. Despite treatment for this, no improvement was seen. Desi went to a specialist at NorthStar for evaluation. She was diagnosed with upper airway disease, and many tests were recommended, but the owners elected not to perform these. A fine needle aspirate of the right ventral cervical mass was performed at the primary veterinarian, and it was recommended that Desi come to VSEC for evaluation. Her respiratory noise and effort is still the same. Her head tilt is static. She is polyuric and polydypsic, and more so on Prednisone.
Current medications:
When did the problem start:
Duration/Progression:
New or recurring problem: <input type="checkbox"/> New <input type="checkbox"/> Recurring
Other:

Diagnostics performed at RDVM:		
Bloodwork	4/1/19	CBC: WBC 19.8 (H) HGB 11.6 (L) HCT 33 (L) NEUT 15840 (H) MONO 1188 (H) RETIC 2.3 (H) Chemistry: ALK 240 (H) BUN 46 (H)
Radiographs	2/18/19	3V thoracic radiographs: Broncho-interstitial pattern. No evidence of pneumonia or metastasis.
Ultrasound		
Urinalysis		
Other	3/29/19	FNA of right cervical mass: Endocrine/neuroendocrine neoplasia most compatible with thyroid carcinoma.

Exam (Objective):				
	Normal	Abnormal	Did not examine	Comments
General Appearance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	BAR.
Body Condition Score	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	BCS 4/9.
Hydration	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mucous membranes/ Oral cavity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Mucous membranes are pink and moist.
Eyes/Ears/Nose/Throat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cardiovascular	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Grade IV/VI heart murmur. Abnormal rhythm.
Respiratory	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lung sounds clear in all fields. Stridor. Occasional abdominal effort when ambulating.
Abdomen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Musculoskeletal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Nervous System	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Head tilt to the right.
Integument	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Approximately 3 cm in diameter, firm but movable mass associated with right ventral cervical area.
Lymph nodes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Genitourinary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Rectal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

VSEC Diagnostics:		
Test	Date	Notes
Bloodwork		
Radiographs		
Ultrasound		
Urinalysis		
Other		

Problem List:
Thyroid mass Grade IV/VI heart murmur Cardiac arrhythmia Stridor Abdominal effort when breathing

Assessment and Plan:
Recommend sedated oral exam, CT scan, +/- thyroidectomy +/- unilateral arytenoid lateralization Recommend cardiology consultation

Release Notes
<p>Summary and Instructions:</p> <p>Desi presents for evaluation of a thyroid mass. On exam today and at home, Desi's breathing is abnormal and concerned. Her heart also auscults abnormally with both a murmur and abnormal rhythm. Ideally, a cardiology consultation would be done to make sure that she is cleared for general anesthesia. You have elected to go forward with a sedated oral exam, CT scan with possible thyroidectomy and unilateral arytenoid lateralization pending our findings without this exam. Below discusses these two disease processes and how they are treated:</p> <p>The opening to the trachea ("windpipe") is normally pulled open on both sides during inhalation and relaxes during exhalation. In dogs and cats with laryngeal paralysis, the muscles that normally pull the airway open do not function properly.</p> <p>When an affected pet breathes in, the walls of the airway do not pull open and instead are sucked inward, narrowing the</p>

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airway and decreasing airflow. In the early stages of laryngeal paralysis, this creates increased noise when the animal is breathing, and changes in bark may be noticed.

As the disease progresses, it can completely obstruct their airway, causing suffocation. Because animals cool themselves via their airway, obstruction or difficulty breathing can cause them to overheat, which may be life threatening.

In the early stages of this condition, medical management includes weight loss, avoiding heat and high stress situations, and sedation during periods of excitement. It is recommended that these dogs are walked in the morning or evening if the weather is hot or humid, and that they are kept in a cool, dry environment.

Medical care during a breathing crisis often includes oxygen therapy, external cooling, sedation, and occasionally a brief period of intubation and assisted breathing. Most patients improve with this therapy, but will often relapse before they leave the hospital or soon after. Therefore, surgical correction is often recommended.

The most common surgical procedure to correct this condition is called a Unilateral Arytenoid Lateralization or "Tieback." During this procedure, a suture is placed to permanently hold the wall of the airway open on one side of the larynx. To minimize the chance of fluid or food entering the airway, only one side is pulled open enough to allow airflow. This helps prevent airway compromise and decreases the risk of future breathing crises.

Restrictions following surgery are VERY IMPORTANT, and include using a harness instead of a neck collar indefinitely, minimizing barking for 6 weeks as this can stress the suture, pre-forming meals into small meatballs, considering an elevated feeding station, and weight loss (if needed). Because part of the airway is now held permanently open, no swimming should be allowed for the remainder of the pet's life.

Potential surgical complications include incisional infection, seroma formation (an accumulation of fluid under the incision), loss of voice, coughing during or after eating and drinking (usually tapers off with time), breakdown of surgical repair (requiring re-operation), and aspiration of regurgitated stomach contents into the lungs (resulting in mild to severe pneumonia).

Whether or not surgery is performed, all dogs with laryngeal paralysis are at a lifelong risk of developing pneumonia. Signs of pneumonia include coughing, difficulty breathing, increased breathing effort, fever, lethargy, and decreased appetite. Affected dogs should be re-examined if there are any concerns as pneumonia can be fatal if not addressed.

Dogs and cats have two thyroid glands that are located on either side of the trachea (windpipe) in the neck. These glands are responsible for making and storing thyroid hormone.

The most common thyroid tumors that are detected clinically are malignant (carcinomas) and benign adenomas. The prognosis for thyroid adenomas is excellent, and surgery is usually curative. In order to obtain a definitive diagnosis, however, surgical removal and histopathology is necessary.

At this time we recommend surgical exploration and removal of the thyroid mass. Occasionally during surgery, the mass is found to be significantly more invasive than initially suspected, and it may be determined that it cannot be safely removed without risking severe hemorrhage.

Other potential complications include removal with incomplete margins, infection, hypothyroidism, and nerve damage. There are two nerves (the recurrent laryngeal and vagus nerves) that travel along the trachea and are at risk of becoming damaged by invasive tumors. If damaged, laryngeal paralysis and/or megaesophagus (severe esophageal enlargement) can occur. Laryngeal paralysis can cause a change in voice, gagging, or coughing, and over time may progress and cause difficulty breathing, though most patients with unilateral (one-sided) laryngeal paralysis are asymptomatic.

Further treatment recommendations may be made based on the biopsy results.

Medications:

Recheck Recommendations:

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VSEC Conshohocken

625 Ridge Pike, Conshohocken, PA 19428
Phone: 484- 567-7999 Fax: 484-567-7998

VSEC Levittown

301 Veterans Highway, Levittown, PA 19056
Phone: 215-750-7884 Fax: 215-752-3156

VSEC Philadelphia

1114 S. Front Street, Philadelphia, PA 19147
Phone: 267-800-1950 Fax: 215-752-3156

Desi is scheduled for her procedure this Friday, April 13, 2019. Please drop off between 7-8 AM. Do not feed after 12 AM. She can have water.

Attending Veterinarian:



Ron Ben-Amotz , DVM, MS, DACVS, DECVS

Thank you for allowing the Veterinary Specialty & Emergency Center to participate in the care of Desi. If you have any questions or concerns regarding the treatments or recommendations for Desi, please call VSEC at (267) 800-1950. The Veterinary Specialty & Emergency Center is open 24 hours each day for the care and treatment of your pet.

Signature of Owner/Agent

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