

Tests and Results

Initial puppy veterinary visit:

10/26/2009	Weight 17.2 pounds	Temp 101.5
10/26/2009	Pediatric comprehensive exam	
10/26/2009	Canine Distemper #2 (DA2PP)	

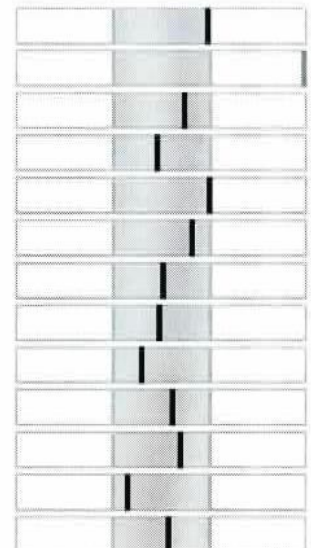
ER visit after the first seizure:

11/7/2009	Weight 19.5 pounds	
	Attitude	QAR
	Heart Rate	120 bpm
	Resp Rate/Effort	wnl
	Temp	101.9
	CV/Lungs	Cardiac auscultation wnl; Lungs clear; Peripheral pulses wnl
	CRT	<2
	Mucous Membranes	Pink/Moist
	Oral Cavity	wnl
	EENT	wnl
	LN/Thyroid	wnl
	GIT/Abdominal Palpitation	wnl
	Neuro	wnl
	Genit/Urinary	wnl
	Musculoskeletal	wnl
	Integument	wnl
	CBC	wnl
	Chem	Alk phos 1231 (46-337)
	Electrolytes	

VetTest

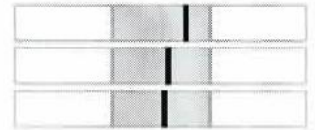
11/07/2009 05:06 PM

ALB	3.5	2.1-3.6 g/dL
ALKP	1231HIGH	46-337 U/L
ALT	55	8-75 U/L
AMYL	713	300-1300 U/L
BUN	28	7-29 mg/dL
Ca	11.5	7.8-12.6 mg/dL
CHOL	245	100-400 mg/dL
CREA	0.7	0.3-1.2 mg/dL
GLOB	2.7	2.3-3.8 g/dL
GLU	119	77-150 mg/dL
PHOS	8.6	5.1-10.4 mg/dL
TBIL	0.1	0-0.8 mg/dL
TP	6.1	4.8-7.2 g/dL

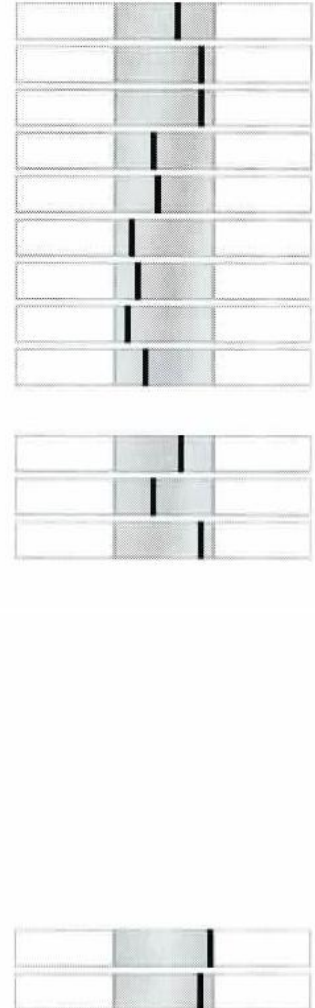


VetLyte**11/07/2009 04:59 PM**

Cl	115	105-119 mmol/L
K	4.6	3.5-5.5 mmol/L
Na	151	145-157 mmol/L

**LaserCyte****11/07/2009 04:54 PM**

%RETIC	0.5	%
NEU	8.43	3-12 K/ μ L
LYM	4.23	0.5-4.9 K/ μ L
MONO	1.73	0.3-2 K/ μ L
EOS	0.6	0.1-1.49 K/ μ L
BASO	0.04	0-0.1 K/ μ L
RBC	5.27	4.7-8.5 M/ μ L
HGB	11.9	10.3-18 g/dL
HCT	34.2	32-55 %
MCV	64.9	60-77 fL
RETIC	25.7	K/ μ L
MCHC	34.8	30-37.5 g/dL
MCH	22.6	18.5-30 pg
PLT	449	175-500 K/ μ L
MPV	9.39	fL
PCT	0.4	%
PDW	15.9	%
%NEU	56.1	%
%LYM	28.1	%
%MONO	11.5	%
%EOS	4	%
%BASO	0.2	%
RDW	17.7	14.7-17.9 %
WBC	15.02	5.5-16.9 K/ μ L



Fecal & float smear to test for parasites:

10/26/2009	Fecal parasite screening
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Results: Negative float and smear

11/25/2009 – First visit to the neurologist:

Presenting Complaint Episodes

History

Has had 4 episodes since October 26th.
October 26th 2nd DA2PP.

The first episode was seen about 4-6 days after the vaccine. The owner say Cheyenne get wobbly in the pelvic limbs, her rear end was turned towards her right and it lasted about 10 seconds. She returned to her normal self and continued playing.

Nov 7th 3:30 pm: 30 sec episode, was able to record. Was in the front yard playing with Peanut when she started to become ataxic and disoriented, stumbling around. She had muscle rigidity in all four limbs but did not fall over, her head was bobbing from side to side and she started to salivate, foam at the mouth. The mouth did open/close. At the end of the episode the head movement was more side to side without the bobbing. She did not lose consciousness but seemed disoriented especially during the seizure. The episode was 2-3 min. By the time they got to the ER, she was normal. Lab work included cbc/profile; Alk was 1231

Nov 18th:

Running in the back yard with other dogs, came running to see the owner was being clingy and whiney and had thick foamy saliva on her mouth and down her front leg.

Nov 22:

Was out for 45 min walk, started chattering her lower jaw while sitting at the end of the driveway waiting for a treat.

Fed Orijen dry puppy food and Merrick or Wellness canned food, some people food, biscuits, pig ear, beef marrow (cooked). Had been feed some raw food but not since Oct /09

Nov 11: fecal done; -ve.

NO hx of ear infections.

Good appetite. No weight loss. No C/S/OND/V/D/PU/PD

Vaccinations: UTD

Current Medications:

None

Exam Summary

Cheyenne's examination today is normal. I was able to see a bit of a video on the 2nd episode. Cheyenne's head swayed side to side and she seemed to become ataxic. The episode was not a classic grand mal seizure so we need to consider other possible causes. Seizures tend to happen at times of rest, each episode seen was during activity, so a syncopal event would be another possibility. A vestibular event would be another possible cause of the episode.

I am recommending that we start with a post fed bile acids, to r/o liver dysfunction. A toxoplasmosis titer (split IgG/IgM) via Idexx and a Neospora titer via Cornell University can be submitted at the same time. If the bile acids is -ve a MRI should be considered to evaluate for structural brain disease (hydrocephalus which can cause seizures or vestibular events) +/- CSF tap and analysis to evaluate for inflammation.

The Pilant's will have the lab work done at her clinic and will contact me with the results. I have dispensed a Valium kit to have on hand incase the episodes to turn into a grand mal seizure.

Please keep me posted.

Medications

Rectal Administration of Valium (5mg/mL): Dose 3 mls

Uses/Indications: Rectal administration of valium is to be given when your pet is observed having a seizure that persists over 4 minutes or is the 2nd seizure in an series of cluster seizures.

1. Draw up the prescribed amount of valium into the catheter tip syringe.
2. Insert the catheter into the rectum.
3. Inject the valium
4. If seizure activity persists despite rectal valium, you may repeat the above directions up to 3 times total at 5 minute intervals. If seizures persist despite the use of the first dose of rectal valium, proceed immediately to your local veterinarian or emergency hospital for IV infusion of valium, but bring the valium with you in the car to administer the 2nd & 3rd doses as directed above.

Side Effects: Sedation and tranquilization can be variable in dogs. Sometimes can acutally result in hyperexcitability.

Storage: Store in brown glass vials at room temperature. Needs to be protected from light and plastic. The Valium kits dispensed should be replaced yearly.

12/4/2009 – Blood collected for thyroid test, bile acid test, and full neurologic blood panel

12/9/2009 – Started 30 days of Doxycycline to treat for Lyme.

12/10/2009 – Thyroid test results back:

Endocrine Results			
Collected Date/Time (If Provided)	12/04/2009 14:09:00		
Procedure		Ref Range	Units
Total Thyroxine (TT4)	48	[15-67]	nmol/L
Total Triiodothyronine (TT3)	2.0	[1.0-2.5]	nmol/L
Free T4 by dialysis	29	[6-42]	pmol/L
Free Triiodothyronine (FT3)	6.2	[4.5-12.0]	pmol/L
T4 Autoantibody	8	[0-20]	%
T3 Autoantibody	2	[0-10]	%
Thyroid Stimulating Hormone	7	[0-37]	mU/L
Thyroglobulin Autoantibody *	3	[0-35]	%
Endocrinology Comment	See Below		

12/4/2009 2:09:00 PM Thyroglobulin Autoantibody:

< 20% Negative

20 - 35 % Inconclusive

> 35% Positive

12/4/2009 2:09:00 PM xEndo No Interp:

This submission was made without a request for a written interpretation. If the submitting veterinarian would like a written interpretation of these results, please contact the laboratory via the telephone or fax numbers listed above. Please refer to the encounter number at the top of this report. Thank you for using the services of this laboratory.

12/11/2009 – Cardiac Ultrasound and cardiac event monitor fitting. Ultrasound results were normal.

12/14/2009 – No cardiac event results because Cheyenne chewed through the sensor wires.

12/16/2009 – Bile acids and neurologic panel results back:

BILE ACIDS				
Test	Result	Reference Range	Flag	Bar Graph
BILE ACIDS	< 1.0	LESS THAN 7.0 umol/L		
RESULT VERIFIED BY REPEAT ANALYSIS				
Comments: In both dogs and cats resting bile acids >7 umol/L or post prandial bile acid concentrations >15 umol/L are suggestive of liver malfunction but does not indicate the nature of the abnormality or whether the problem is reversible or permanent. A liver biopsy may be warranted to further identify the underlying hepatopathy. Increased bile acids can be seen in diseases affecting hepatic circulation (i.e. liver shunts), cholestasis, or diseases associated with hepatocellular damage. Dehydration, hypovolemia, and chronic passive congestion have only a minor effect on bile acid levels. A normal bile acid level does not rule out a hepatopathy.				

CRYPTOCOCCUS ANTIGEN TITER

Test	Result	Reference Range	Flag	Bar Graph
CRYPTOCOCCUS ANTIGEN TITER	NEGATIVE			

NEOSPORA IFA

Test	Result	Reference Range	Flag	Bar Graph
NEOSPORA IFA	NEGATIVE			

Comments:

Neospora IFA Interpretation:

The indirect fluorescent antibody (IFA) titer is the reciprocal of the highest dilution of serum that produces a specific fluorescent signal on infected cells (endpoint dilution of 1:100 = antibody titer of 100). Titers are in units of antibody and as such all values reported without modifiers contain that specified amount of antibody in the sample. Values with a < (less than symbol) indicate no detectable

antibody at the minimum readable dilution (<100 = no detectable antibody at the 1:100 dilution). An antibody titer can result from infection, passive maternal transfer or vaccination.

In cattle, the titer of antibody in the animal is generally of little value. Accordingly we test samples at a single dilution (1:100) and report the sample as either "positive" or "negative".

In dogs, titers do have clinical significance and samples are tested to their endpoint. Samples are reported as "negative" (no detectable antibody at the screening dilution of 1:50) or the endpoint titer value. Values of <200 are generally not associated with clinical disease.

TICK PANEL #9		EHRlichia CANIS AB IFA			
Test		Result	Reference Range	Flag	Bar Graph
EHRlichia CANIS AB		NEGATIVE			
Comments:					
Interpretation:					
If your result is:		The interpretation is:			
NEGATIVE		No antibody present @ 1:25			
POSITIVE @ (titer)		Antibody present @ (titer)			
Positive samples are tested in incremental dilutions to 1:3200. Titers beyond 1:3200 are usually of limited clinical value. If you wish an endpoint titer there is an additional charge. A positive titer indicates exposure to E.canis or similar antigen but does not confirm the presence of disease. A CBC is recommended to identify abnormalities consistent with infection. If confirmation of infection is desired, Ehrlichia PCR test, code 2634 can be useful, especially in clinically sick animals.					

TICK PANEL #9		ANAPLASMA PHAGOCYTOPHILUM			
Test		Result	Reference Range	Flag	Bar Graph
ANAPLASMA PHAGOCYTOPHILUM		NEGATIVE			
Comments:					
Interpretation:					
If your result is:		The interpretation is:			
NEGATIVE		No antibody present @ 1:50			
POSITIVE @ (titer)		Antibody present @ (titer)			
Anaplasma phagocytophilum was formerly called Ehrlichia equi. Positive samples are tested in incremental dilutions to 1:3200. Titers beyond 1:3200 are usually of limited clinical value. If you wish an endpoint titer there is an additional charge. A positive titer indicates exposure to E.equi or similar antigen (Anaplasma platys) but does not confirm the presence of disease. A CBC is recommended to identify abnormalities consistent with infection. If confirmation of infection is desired, Anaplasma spp. by RealPCR (test code 2824) can be useful especially in clinically sick animals.					

TICK PANEL #9	ROCKY MOUNTAIN SPOTTED FVR			
Test	Result	Reference Range	Flag	Bar Graph
ROCKY MOUNTAIN SPOTTED FVR	NEGATIVE			
Comments: Interpretation: If your result is: The interpretation is: NEGATIVE No antibody present @ 1:25 POSITIVE @ (titer) Antibody present @ (titer) Positive samples are tested in incremental dilutions to 1:1600. Titers beyond 1:1600 are usually of limited clinical value. If you wish an endpoint titer there is an additional charge. Singles titer of greater than or equal to 1:1024 are suggestive of active infection. Low or negative acute titers should be reevaluated in 2-3 weeks (convalescent titer).				

TOXOPLASMA IGG & IGM ELISA				
Test	Result	Reference Range	Flag	Bar Graph
TOXOPLASMA IgG	NEGATIVE			
Negative. Antibodies against T. gondii were not detected in the serum sample provided which indicates lack of exposure or peracute infection.				
TOXOPLASMA IgM	NEGATIVE			
Referral test performed at Colorado State University.				

LYME C6 QUANT AB ELISA

Test	Result	Reference Range	Flag	Bar Graph
LYME C6 QUANT AB ELISA	89	- U/mL		

Comments:

INTERPRETIVE CRITERIA FOR LYME QUANTITATIVE C6 ANTIBODY TEST

For dogs with no prior SNAP 4Dx test result and clinical signs of Lyme disease:

- 1. If Lyme Quant C6 is <30 U/mL, antibody level is considered clinically insignificant; consider other differentials.
- 2. If Lyme Quant C6 is >30 U/mL, antibody level is considered clinically significant; initiate treatment and retest in 6 months.**

For dogs SNAP 4DX Lyme positive with clinical signs:

- 1. Test with Lyme Quant C6 for baseline result (if < 30 U/mL consider other differentials.)
- 2. Initiate treatment.

- * a. Consider treatment,
- * especially if history of
- * lameness within past year.
- * b. If treated, retest in 6
- * months.**

3. Retest at 6 months**.

Convalescent Level	* Convalescent Level
1. If C6 level drops \geq or = 50% treatment was successful	* 1. If C6 level drops \geq or = 50% treatment was successful.
2. If C6 level drops <50%, consider:	* 2. If C6 level drops <50%, consider:
a. Non-compliance with treatment - consider retreating.	* a. Non-compliance with treatment - consider retreating.
b. Re-infection - re-evaluate tick control/consider retreating	* b. Re-infection - re-evaluate tick control/consider retreating
c. Chronic infection	
* If patient had tick exposure in last month and could be in process of seroconverting, consider retesting in 6-8 weeks.	
** Retest at 6 months using quantitative C6 test and interpretive comments below. SNAP 4Dx test can be used, but is likely to remain Lyme positive and would require follow up quantitative C6 testing.	

12/18/2009 – Cardiac recheck

12/22/2009 – Neurologist started Cheyenne on 100 mg Zonisamide (BID) due to continuing seizures.

12/23/2009 – Cheyenne fitted with a Holter (cardiac) monitor; removed the following day.

12/30/2009 – First MRI and spinal tap/fluid (CSF) analysis.

1/06/2010 – First MRI and CSF analysis results back.

MRI identified suspected abnormal left frontal sinus cavity, everything else normal. CSF analysis was normal.

1/12/2010 – Neurologist started Cheyenne on 30 mg Phenobarbital (BID) in addition to the Zonisamide due to continuing seizures.

1/15/2010 – Holter monitor test results back:

BASIC RHYTHM: SINUS TACHYCARDIA

GENERAL RESULTS: KELLY, CHEYENNE was monitored for a total time of 21:11 hours. Tape start time was set at 3:25PM1. During this monitoring period, the high heart rate registered was 284 BPM at 10:44AM2 and the low heart rate registered was 75 BPM at 3:05AM2. The mean heart rate was 131 BPM. There were 168506 total beats.

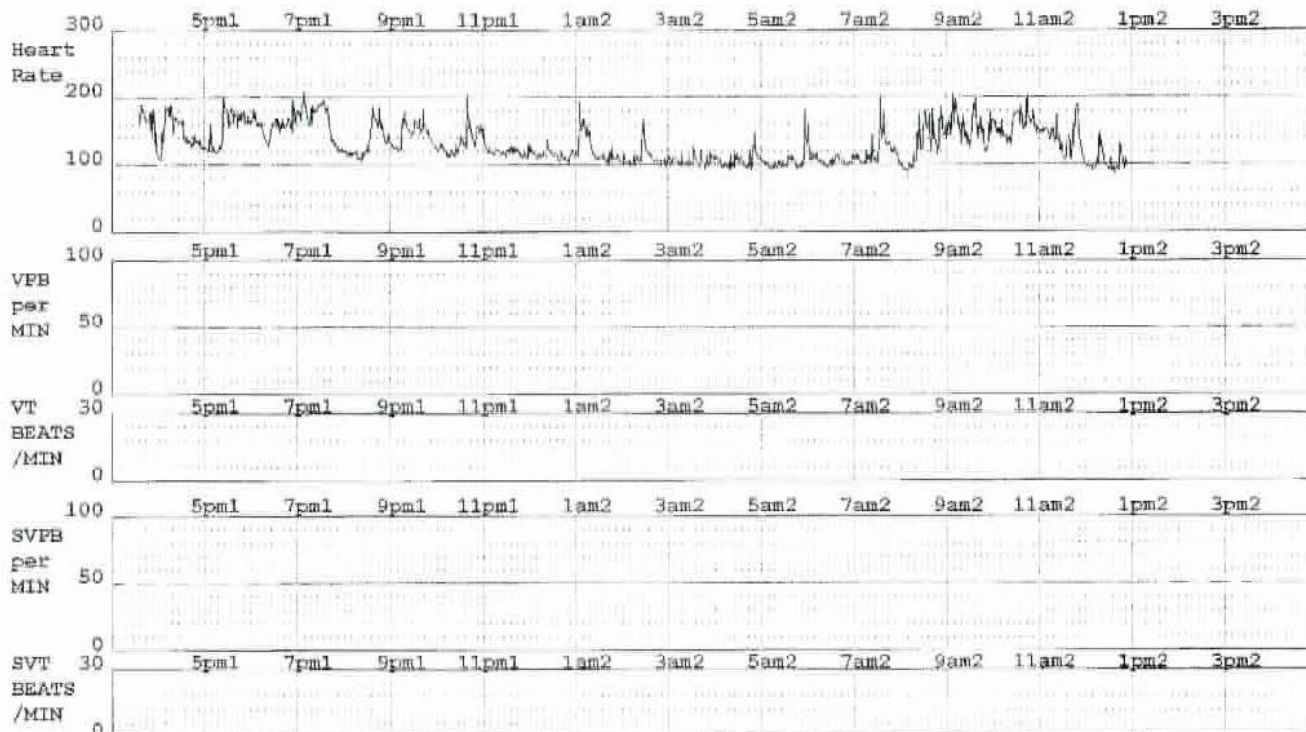
VENTRICULAR RESULTS: There were a total of 0 ventricular ectopic beats in this monitoring period. These were comprised of 0 single isolated ventricular ectopic beats, of which 0 were early by 10 % and 0 were late. There were 0 pairs of ventricular ectopic beats, 0 runs of ventricular ectopic beats.

SUPRAVENTRICULAR RESULTS: There were a total of 0 supraventricular ectopic beats in this monitoring period. The prematurity setting was set at 30%. These were comprised of 0 single isolated supraventricular ectopic beats, 0 pairs of supraventricular ectopic beats, and 0 runs of supraventricular ectopic beats.

IMPRESSIONS: PREDOMINANT RHYTHM WAS SINUS TACHYCARDIA. NO ECTOPY NOTED. PT WAS ASYMPTOMATIC. TAPE QUALITY WAS GOOD. SCANNED BY KMT

GENERAL PROFILE

INTERVAL STARTING	HEART RATE			TOTAL BEATS	VPB		RUNS VT	SVPB		RUNS SVT	PAUSES	TIME ANALYZED
	LO	MEAN	HI		TOTAL	PAIRS		TOTAL	PAIRS			
3:25PM1	93	161	229	4023	0	0	0	0	0	0	0	0:24
4:00PM1	93	147	245	8606	0	0	0	0	0	0	0	0:59
5:00PM1	99	153	270	9103	0	0	0	0	0	0	0	0:59
6:00PM1	112	156	245	9427	0	0	0	0	0	0	0	0:59
7:00PM1	104	166	263	9771	0	0	0	0	0	0	0	0:58
8:00PM1	91	133	270	7952	0	0	0	0	0	0	0	0:59
9:00PM1	100	145	234	8718	0	0	0	0	0	0	0	0:59
10:00PM1	96	134	245	8021	0	0	0	0	0	0	0	0:59
11:00PM1	93	120	196	7216	0	0	0	0	0	0	0	1:00
12:00AM2	86	115	200	6918	0	0	0	0	0	0	0	0:59
1:00AM2	76	122	263	7312	0	0	0	0	0	0	0	0:59
2:00AM2	78	110	234	6607	0	0	0	0	0	0	0	0:59
3:00AM2	***	105	192	6320	0	0	0	0	0	0	0	0:59
4:00AM2	***	106	200	6363	0	0	0	0	0	0	0	0:59
5:00AM2	78	104	234	6255	0	0	0	0	0	0	0	1:00
6:00AM2	81	107	207	6456	0	0	0	0	0	0	0	1:00
7:00AM2	82	119	270	7170	0	0	0	0	0	0	0	0:59
8:00AM2	***	130	245	7774	0	0	0	0	0	0	0	0:59
9:00AM2	102	155	263	9164	0	0	0	0	0	0	0	0:59
10:00AM2	108	158	***	9186	0	0	0	0	0	0	0	0:57
11:00AM2	87	139	284	8336	0	0	0	0	0	0	0	0:59
12:00PM2	76	103	234	5598	0	0	0	0	0	0	0	0:54
SUMMARY:	76	131	284	166506	0	0	0	0	0	0	0	21:11



Prematurity for early set at 36%

INTERVAL	BEATS	TIME	SVPB	SVPB	SVPB		
STARTING	TOTAL	ANALYZED	TOTAL	SINGLE	PAIRS	SVT	#BEATS
3:25PM1	4023	0:24	0	0	0	0	0
4:00PM1	8806	0:59	0	0	0	0	0
5:00PM1	9103	0:59	0	0	0	0	0
6:00PM1	5427	0:59	0	0	0	0	0
7:00PM1	8771	0:58	0	0	0	0	0
8:00PM1	7852	0:59	0	0	0	0	0
9:00PM1	8718	0:59	0	0	0	0	0
10:00PM1	8021	0:59	0	0	0	0	0
11:00PM1	7216	1:00	0	0	0	0	0
12:00AM2	6918	0:59	0	0	0	0	0
1:00AM2	7912	0:59	0	0	0	0	0
2:00AM2	6607	0:59	0	0	0	0	0
3:00AM2	6320	0:59	0	0	0	0	0
4:00AM2	6363	0:59	0	0	0	0	0
5:00AM2	6265	1:00	0	0	0	0	0
6:00AM2	6456	1:00	0	0	0	0	0
7:00AM2	7170	0:59	0	0	0	0	0
8:00AM2	7774	0:59	0	0	0	0	0
9:00AM2	9164	0:59	0	0	0	0	0
10:00AM2	9186	0:57	0	0	0	0	0
11:00AM2	8336	0:59	0	0	0	0	0
12:00PM2	5599	0:54	0	0	0	0	0
SUMMARY:	16650	21:11	0	0	0	0	0

[illegible]

Prunus for only 2 m at 124

INTERVAL	BEATS	TIME	VPR	SINGLE		VPR			
STARTING	TOTAL	ANALYZED	TOTAL	EARLY	LATE	PAIRS	VTACH	#BEATS	RonT
3:25PM1	4023	0:24	0	0	0	0	0	0	0
4:00PM1	8806	0:59	0	0	0	0	0	0	0
5:00PM1	9103	0:59	0	0	0	0	0	0	0
6:00PM1	9427	0:59	0	0	0	0	0	0	0
7:00PM1	9771	0:58	0	0	0	0	0	0	0
8:00PM1	9852	0:59	0	0	0	0	0	0	0
9:00PM1	8718	0:59	0	0	0	0	0	0	0
10:00PM1	8071	0:59	0	0	0	0	0	0	0
11:00PM1	7216	1:00	0	0	0	0	0	0	0
12:00AM2	6928	0:59	0	0	0	0	0	0	0
1:00AM2	7312	0:59	0	0	0	0	0	0	0
2:00AM2	6607	0:59	0	0	0	0	0	0	0
3:00AM2	6320	0:59	0	0	0	0	0	0	0
4:00AM2	6363	0:59	0	0	0	0	0	0	0
5:00AM2	6265	1:00	0	0	0	0	0	0	0
6:00AM2	6456	1:00	0	0	0	0	0	0	0
7:00AM2	7170	0:59	0	0	0	0	0	0	0
8:00AM2	7774	0:59	0	0	0	0	0	0	0
9:00AM2	9164	0:59	0	0	0	0	0	0	0
10:00AM2	9186	0:57	0	0	0	0	0	0	0
11:00AM2	8336	0:59	0	0	0	0	0	0	0
12:00PM2	5598	0:54	0	0	0	0	0	0	0
SUMMARY:	166506	21:11	0	0	0	0	0	0	0

[illegible]

LIST OF PRINTED STRIPS

STRIP TIME	STRIP LABEL	HEART RATE	EVENT RATE
3:29:36PM1	START OF RECORDING	HR = 60	
3:37:36PM1	TACHYCARDIA	HR = 180	
4:05:31PM1	TACHYCARDIA	HR = 222	
4:47:29PM1	TACHYCARDIA	HR = 124	
5:20:28PM1	TACHYCARDIA	HR = 178	
6:23:15PM1	TACHYCARDIA	HR = 140	
6:56:48PM1	TACHYCARDIA	HR = 192	
7:49:34PM1	TACHYCARDIA	HR = 132	
8:46:48PM1	TACHYCARDIA	HR = 263	
9:41:47PM1	TACHYCARDIA	HR = 150	
10:39:32PM1	TACHYCARDIA	HR = 220	
11:22:49AM2	NORMAL	HR = 99	
11:37:52AM2	TACHYCARDIA	HR = 111	
12:11:55AM2	NORMAL	HR = 100	
3:09:01AM2	SLOWEST HL RATE	HR = 73	
4:43:49AM2	IRREGULAR R-R	HR = 99	
6:04:14AM2	IRREGULAR R-R	HR = 105	
7:24:47AM2	NORMAL	HR = 91	
8:52:37AM2	IRREGULAR R-R	HR = 183	
10:16:58AM2	TACHYCARDIA	HR = 142	
10:44:14AM2	MAXIMUM H. RATE	HR = 284	
12:54:31PM2	END OF RECORDING	HR = 96	

1/22/2010 – Neurologist increased Phenobarbital dose to 45 mg (BID) due to continuing seizures.

2/3/2010 – Neurologist increased Zonisamide dose to 140 mg (BID) due to continuing seizures.

2/5/2010 – Cheyenne fitted for another cardiac monitor.

2/11/2010 – The event monitor removed and results were normal.

3/15/2010 – Neurologist increased Phenobarbital to 60 mg (BID) and Zonisamide to 200 mg (BID) due to continuing seizures.

3/31/2010 – Neurologist increased Phenobarbital to 79 mg (BID) and started Cheyenne on 25 mg Atenolol (BID) to address possible cardiac source of seizures. Also took blood for CBC and Phenobarbital serum level tests; results were normal.

4/2/2010 – Fasted bile acids test done, results normal.

4/13/2010 – Started Potassium Bromide loading dose 500 mg (TID) due to continuing seizures. Cheyenne later admitted to the hospital due to cluster seizures.

4/14/2010 – Second MRI and spinal tap done due to cluster seizures. Results came back normal but confirmed congenital sinus abnormality.

4/16/2010 – Cheyenne released. Atenolol discontinued, Phenobarbital increased to 97 mg (BID), and Potassium Bromide reduced to 500 mg (BID) daily dose.

4/23/2010 – Cheyenne spayed.

4/28/2010 – Cheyenne admitted to the hospital again due to cluster seizures.

4/29/2010 – Potassium Bromide increased to 875 mg (BID) and 500 mg Keppra (TID) started due to continuing seizures.

4/30/2010 – Ophthalmologist examined Cheyenne and discovered congenital optic nerve hypoplasia, resulting in some level of vision impairment, and abnormal menace response.

5/14/2010 – Potassium Bromide reduced 750 mg (BID) due to severe ataxia and stupor.

5/17/2010 – Phenobarbital and Potassium Bromide serum level blood test done; results normal.

5/27/2010 – Cheyenne started 5 day cluster seizure: 11 tonic-clonic (grand mal) seizures from 30 seconds to 3 minutes in length and 28 attention (focal) seizures.

5/29/2010 – Cheyenne started on Gabapentin (pulse protocol) due to continuing seizures.

5/31/2010 – Cluster seizure ended.

6/2/2010 – Last day for Gabapentin.