

Animal Info

UNIVERSITY of FLORIDA
Animal Care Services



000000188751

PI: Conlon, Thomas

Protocol: 20090306

UF ID: 10176

Species: Dogs

Vendor: In House

Original Receive Date: 11/9/2010

Transfer Date: 11/9/2010

USDA # 024 861 061 (mark type below)

- Tattoo
- Microchip
- Tag
- Other UFID 10176



AVID*024*861*061

DOB: 9/12/2010 Sex: F

Breed/Strain: beagle / maltose mix

Color/description: white / tan

Building/ Room # VMTH

Animal Name (if applicable) Ginger

Study # (for GLP projects only) _____

Final Status (check one)	Method (if euthanized)	Date: <u>4.3.12</u>
<input checked="" type="checkbox"/> Euthanized <input type="checkbox"/> Adopted <input type="checkbox"/> Deceased <input type="checkbox"/> Transferred	Substance: <u>penthanasia</u> Amount: <u>5ml</u> Route: <u>IV</u>	Initials: <u>(MS)</u> Office Use: _____

* Vet Tech Use Only* Close date: 4/6/12 Initials: LVR

FMACS248-01

APPROVED

[Signature] 1-21-10



PO Box 100006
Gainesville, Florida 32610
Animal Care Services

12P-467 Necropsy report-canine
Protocol #:3064 ID#: 10176)
Investigator: Conlon
Date of necropsy: April 3, 2012

History: GSDla+ managed with oral DSO admitted to UFICU 3/30/12 due to low protein. Treated with IV fluids TPN, AAS and antibiotics. The dog remained stable and values improved until 4/3/12, when the clinical condition declined, the anemia worsened and the dog failed to respond to blood transfusions.

Gross: Obese BCS: 9/9, green staining at perineum, severe lung edema and congestion, approximately 60cc plural effusion (clear). There were focal severe adhesions of liver to stomach and ileum to jejunum.

Diagnosis:

1. Glomerulonephropathy with interstitial nephritis chronic moderate, medullary mineralization, renal pelvis inflammation, chronic, moderate with epithelial hyperplasia, individual cell necrosis, intraepithelial inflammation and eosinophilic cytoplasmic inclusions
2. Hepatitis (cirrhosis) chronic active moderate with patchy necrosis widespread hepatocellular degenerative changes with cord atrophy, rare megalocytes, extra medullary hematopoiesis, abundant megakaryocytes Kupffer cell hyperplasia and bile stasis evident as gold brown pigment in macrophages, hyperplastic bile ducts, and vascular thrombosis
3. Hyperplasia gall bladder with crystalline gold brown debris
4. Gastritis subacute with luminal exudation and exfoliation of epithelial cells submucosal edema and vascular thrombosis
5. Pneumonitis subacute moderate with moderate edema, congestion mild hemorrhage, alveolar debris, mild bronchiolitis rare cytoplasmic eosinophilic inclusions and vascular thrombosis, megakaryocytes are prominent and patchy alveolar histiocytosis is evident in subpleural regions.
6. Cystitis with hyperplasia and epithelial inflammation, individual cell necrosis and eosinophilic cytoplasmic inclusions
7. Spleen: Extramedullary hematopoiesis extensive with abundant megakaryocytes
8. Lymph node, hyperplasia with sinus histiocytosis mild chronic
9. Nodular hyperplasia adrenal cortex chronic, mild
10. Serositis chronic fibrovascular small intestine
11. Ureter: Inflammation, mural, chronic, moderate
12. Serositis fibrovascular chronic intestine

13. Heart: Myocardial myofiber degeneration patchy, mild to moderate with mild interstitial inflammation chronic and subacute, endocarditis and mural thrombosis



4/25/12

Mary Kathryn Reinhard DVM ACVP ACLAM
Pathologist

Initials: MA
Date: 5/16/12

4/10/2012

Client ID: 226847
Client Name: Res-Dr. Specht
Address: Laurie Fiske
Gainesville, FL, 32610
Primary Phone #: (352) 392-2235

Referring Vet: . None
Phone Number: () - /
() -

Patient ID: 233798
Name: Ginger
Species: Canine
Breed: Maltese
Sex: Female
Color: Fawn/White
Markings: beagle mix
Birth Date: 9/3/2010

Small Animal Medicine Discharge Instructions

Euthanasia Date: 04/03/12

Diagnosis

- Glycogen Storage Disease type Ia
- Severe Hypoalbuminemia of unknown cause
- Non-degenerative left shift without neutrophilia
- Probable chronic protein malnutrition
- Severe Pulmonic Stenosis with pulmonary hypertension
- Vomiting, Nausea of unknown cause
- High lactate values

All of the above were present prior to presentation

After presentation, the following additional clinical problems were suspected, identified, or diagnosed:

- Acute Kidney Injury / E. coli urinary tract infection (probable pyelonephritis) - identified within hours of presentation.
- Suspect severe sepsis based on progression to neutrophilia with a toxic degenerative left shift coupled with tachycardia, tachypnea, and hyper- & hypo-thermia
- Severe Anemia of unknown cause - suspect hemorrhage (probably GI or pulmonary), but did not have time to completely rule out other causes.
- Severe interstitial pulmonary pattern most consistent with inflammatory, hemorrhagic, or edematous pulmonary disease - no definitive ante-mortem diagnosis.
- Thrombus within cranial vena cava associated with central line - no evidence of global hemostatic disturbance based on TEG testing.
- Severe thrombocytopenia (likely consumptive, but no definitive cause identified)
- Acute Pulmonary Hemorrhage / Hemorrhagic pneumonia (found at necropsy)

Case Summary

Ginger was brought to the UF SAH ICU on the afternoon of 3/30/12 for supportive care related to her problem of severe hypoalbuminemia of unknown cause and the left shifted neutrophil line. She was mildly depressed and had shown some clinical signs of vomiting or regurgitation and evidence of nausea that day. Once she arrived, a central line was placed. An echocardiogram was performed to help assess the current status of her pulmonic stenosis, especially in light of the presumed need for administration of significant IV fluid volumes. This revealed a slightly worsened gradient with moderate to severe pulmonary hypertension, however there was still no significant cardiac muscle remodeling or chamber enlargement. She also had abdominal and thoracic radiographs and abdominal ultrasound. Somewhat surprisingly, the liver was not markedly enlarged at this time, and there was no obvious evidence of osteoporosis/osteopenia (as had been observed in Dulce). In general there were no obviously significant radiographic abnormalities. Abdominal ultrasound did reveal slight pyelectasia (dilation of the renal pelvises) with a perceived mild thickening of the ureteral wall. A urinalysis revealed marked bacteriuria, pyuria, hematuria, cylindruria (granular casts), and the presence of a significant number of renal tubular epithelial cells.

Treatment Record



UNIVERSITY OF FLORIDA

Animal Care Services

Animal ID #: Gweyn

Species: Canine

Investigator: Condon

DATE	TREATMENT RX DOSAGE ROUTE FREQUENCY DURATION	FX	DATE AND FREQUENCY GIVEN														
			Please Initial All Entries														
	Clavamox 62.5mg/100ml		3/19	3/20	3/21	3/22	3/23	3/24	3/25								
7/7	Gwe 1.2cc PO BID	6a	KP	KP	FP												
1st dose	<p>① didn't give</p> <p>Not in fridge or anywhere else</p> <p>② have antibiotic</p>	6p	CP	AT													
			8/5	8/6	8/7												
5/11	Panacur 50mg/kg PO x 3 days.		WP	CP													
6/16	Metronidazole (1/4 tab)	5u	X	MA	SF	CM											
	PO BID	5p	LF	LW	IM	NF	PM										
11/11	Amoxicillin (15mg/kg)	AM	11-16	11-17	11-18	11-19	11-20	11-21	11-22	11-23	11-24	11-25	11-26	11-27	11-28	11-29	12-1
	1.9cc PO X BID X 14 DAYS	PM	X	GP													
			LF							NE	AB	NF	AB				

APPROVED

AVJ 3/20/05

ORIGINAL COPY: 28
 initials: CKB
 10/31/06

DAILY PROGRESS NOTES

Animal ID No: Chickpea 7H15 Species: K-9
 Investigator: Conlon Study #: 20080119 Page: _____

Please Include Day, Month And Year In Each Date And Initial All Entries

Date	Initials	— Procedures • Problems • Progress • Plans • Tests • Treatments —
9/5	CU	Temperature 99.5°F @ 6:30 AM
9/6/10	SF	Temp: 99.6°F @ 5:30 am
9/7/10	KP	Temp: 99.7°F @ 6:30 am
9/7/10	BG	Temp: 99.2°F @ 2:15 pm
9/8/10	CND	temp 99.1°F @ 7:00 am
9/8/10	WBC	Reported for hard breathing. Dog BAK, due for labor this weekend. very happy waggng tail, heavy weight. Hyd WNL. No concerns. Normal behavior during pregnancy.
9/9/10	TC	Blood collect via @ cephalic. 1.8cc TC for P4 levels
9/9/10	ALT	Temp: 99.5°F @ 3:30p; Gave vitamins @ 3:00p; Wt = 12.13 kg
9/10/10	LF	Ultrasound of fetal heart rates. All heart rates above 200 beats/min - Normal.
9/10/10	SF	Temp: 99.6°F @ 3:30p. Gave 2 gummy vitamins @ 3:45p
9/11/10	MA	Temp: 98.7°F @ 5:30a
9/11/10	JA	Reported for labored breathing. Dog is BAK, happy + wagging tail. No labored breathing obs. Dog would occasionally whine when laying down. No signs of pain or discomfort. Vet notified. Temp: 98.9°F @ 12:28 pm.
9/11/10	SA	Gave 2 gummy vitamins
9/12/10	TC	US exam on fetuses; HR = 180 on 3 of them; CP temp 97.8°F; labored breathing; panting
9/12/10	@	Transported to H&C sn suite for c-section, see anesthesia sheet for details of anesthesia
9/12/10	AD	Elective C-section: to ventral midline incision, that was not necessary ^{blatant} incision closed w/ 2.0 PDS in a double layer curving/leisner, 2.0 PDS closure (continues) on linea, 3.0 vicryl closure subcutaneous and

DAILY PROGRESS NOTES



Animal ID No: Chickpea 7H15 Species: K:9
 Investigator: Conlon Study #: 20080119

Please Include Day, Month And Year In Each Date And Initial All Entries

Date	Initials	— Procedures • Problems • Progress • Plans • Tests • Treatments —
10/19/10	WPC	Esperanza was reported for vomit yesterday. ~1.5cc white foamy mucor milk like fluid. Today Dog BAR, no reports of vomiting. All parameters WNL. No concerns. Randy has a pin point tiny hole R site proximal to penis. No redness inflammation or signs of pain. All parameters WNL. No concerns. No Tx needed.
10.20.10	WPC	Randy reported for black spot on belly. Comedone noted. All else WNL, except 1 episode V yest. PM; night after meal. No concerns noted on brief PE, no other V episodes. No tx needed.
10/21/10	WPC	Ginger reported for being "shaking" yesterday. PM. Today Puggay BAR. very alert playful. No shaking observed. No concerns.
10/25/10	DM	All Peppies administered @ 50mg/kg Panacem PO @ 5mg/kg → ginger 647g, Esperanza 1.24kg, Randy 1.24kg, Marc Anthony - 1.6kg. see tx sheet Red lesion on right side of base of tail about 5cm long x 2cm wide - no discharge. Small scratch, not painful to the touch will resolve w/tx.
10/26/10	T	Toe pad blood collection for fasting studies on Randy, Ginger and Marc Anthony
10.26.10	WPC	Ginger reported for caked feces @ anus; PI cleaned, but feces were getting stuck to hair; hair shaved. Small scabs on anus @@ the middle/ventral area (~1mm). Should heal fine; no worries. Chickpea had small area of alopecia @ turl bar R side - dry, healy Anal glands v'd, expressed some thick anal gland fluid; CP BAR.

APPROVED

Conlon 1.1.11X

EXACT COPY: 28
Initials: WPC

Animal ID No: 7415 Species: canine
Investigator: Conlon Study #: _____

Please Include Day, Month And Year In Each Date And Initial All Entries

Date	Initials	— Procedures • Problems • Progress • Plans • Tests • Treatments —
10-26-10	MS	defecating normally, non-painful. No tx @ this time.
10-27-10	MS	Ginger reported for scooting/straining while defecating. No report of diarrhea. On exam, ginger BAR, anal area clear + dry, non-painful to touch. No itching/scooting observed. Rubbed as reported, no other tx @ this time.
10/01/10	DM	Reported for whimpering → she is BAR, active nursing puppies, no concerns at this time.
10/03/10	DM	Reported for <u>Ginger</u> shaking after/during eating. Found her to be limp, couldn't stand up + a right head tilt. Tried to obtain glucose + lactate reading - Ginger start to have what looked like seizure - rush to ICU. Vet notified, PT is aware of situation.
11/1/10	π	Returned to room from ICU at 1:00p see ICU record for while in ICU.
11/05/10	DM	Ginger Reported for vomiting @ 2:50am. She was eating her food when it arrived. She is BAR, playing + silding. Lab is taken care of her. no other vomiting reported. no concerns @ this time.
11/10/10	JA	Reported for vomiting up what looked like Edgilac after "Ginger" being fed. Ginger is very quiet. According to tech watching puppies, she plays for 15min + sleeps for 15min. Puppies mm-pelmaist. Being fed when I arrive.

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AVB 11/10/10

EXACT COPY: 28
Initials: CKLB
Date: 9-18-08

DAILY PROGRESS NOTES



Animal ID No: 7H15 Chickpea Species: kg
 Investigator: Coulon Study #: _____

Please Include Day, Month And Year In Each Date And Initial All Entries

Date	Initials	— Procedures • Problems • Progress • Plans • Tests • Treatments —
9/23/10	MBC	Chickpea BARK. Ginger. PRR been feeding w/ gavage every 4 hours Dog looks more active gaining a little weight - see below: 9/20 = 1124.5g, 9/21 = 1165.3g, 9/22 = 1173.1g, 9/23 = 1182.1g. Lab tech said that she's been gagging (reflex from gavage), improving slowly, com.
9/24/10	WR	Marc Anthony reported for vomiting after nursing. Examined by Dr. Struck. No concerns.
9/25/10	JA	Ginger, Marc Anthony + Esperanza have not defecated in 24 hours. Ginger was reported for shaking when moving around the whelping box. Thomas said that the shaking will occur after gavage feeding. Marc Anthony vomited @ 3:50AM after suckling. Vet notified. All puppies are stimulated by the staff, the puppies are BARK + suckling well.
9/26/10	JA	Ginger was reported for having diarrhea. Pipay is BARK & suckling on own. While examining puppy, she had diarrheed w/ a tinge of blood. The staff will collect a fecal sample the next time she defecates. Vet was notified.
9/27	LF	Chickpea wt = 9.62 kg
9/27/10	WPC	2 weeks deworming Chickpea → 50mg/kg Panacur PD (50) & Puppies received Pyrantel 5mg/kg. Esperanza = 558.6g; Randy = 563.3g; Marc Anthony = 703g; Ginger = 734g. see Tx sheet. Ginger - sl. wt loss over weekend, but has rebounded. No longer receiving gavage feeds. See lab notes for details.

DAILY PROGRESS NOTES

Animal ID No: Chickpea 7H15 Species: KC-9
Investigator: Conlon Study #:

Please Include Day, Month And Year In Each Date And Initial All Entries

Date	Initials	— Procedures • Problems • Progress • Plans • Tests • Treatments —
9/27/10	CML	Esperanza opened her eyes @ 10:00am
9/28/10	mfc	Ginger fecal results attached: spirochetes found.
9/29/10	LF	Marc Antony eyes open at midnight + Randy eyes open before 4am today.
9/29/10	K	Tox-pricks used for fasting study on Ginger
9/29/10	K	
9/29/10	mfc	last day 3 rd ferbendazole for Chickpea. see tx sheet
10/1/10	LA	Gingers right eye opened today @ 10:45a
10/2/10	CML	Ginger opened her left eye today
10/2/10	@	Marc, Randy + Esperanza were reported for no defecation in past 24 hrs. Ginger was reported for soft stool. All puppies BAR & nursing. Very active & vocal. Vet notified. NO tx @ this time.
10/4/10	mfc	Ginger lost 1 gram from 3/29 329 grams; now last 330 grams 10/2/10 Puppy BAR: suckling very good & active. No concerns. Hyd WNL.
10/5/10	mfc	Ginger = 358 grams. Chickpea reported for small amount of blood in urine. AM Dog BM, WNL pink. Temp = 100.3°F. No signs of blood around vulva observed. Hyd WNL, happy, waiting for treats. No concerns.
10.6.10	MJ	Health check: CP is BAR, attentive to pups. All pups gaining adequate weight, except BSD affected pup, but Bob who gains @ a slower rate. Affected dog receives protocol-approved tx w/ dietary adjustments as needed. Soft spot in affected puppy's head - open fontanelle still noted; head sl. dome shaped. Track this concern; caution when handling; avoid trauma/rough play.

DAILY PROGRESS NOTES

Animal ID No: Chickpea 7415 Species: canine
Investigator: Cmlm Study #: _____

Please Include Day, Month And Year In Each Date And Initial All Entries

Date	Initials	— Procedures • Problems • Progress • Plans • Tests • Treatments —
10.7.10	MS	pups often upped for no defecation, however, Chickpea cleans up well; no constipation noted.
10/9/10	(CH)	Randy reported for weight loss. Weight record also shows fluctuations on 10/6 + 10/7: 859g → 820g → 843g → 889g. Suspect scale error? Weight this AM recorded as 882g; no weight now is 919g. Obs. nursing well. BAR, active, MM pink, hyd WNL. Vet notified. No tx right now.
10/10/10	(CH)	Randy reported for ↓ 7g this AM, but weight was compared to yesterday PM, not a full 24hrs. 12 ³⁰ pm current weight is 930g, ↑ 10g from 24hrs ago. Puppy BAR, active, hyd WNL, MM pink. Nursing ~5-7 minutes every ~2-4 hrs. Vet notified. No tx right now.
10/12/10	WPC	No monthly preventative given due to Lactation. Dog reported for bloody discharge, BAR. Temp = 100.4 °F. R285, 1 min pulse. No bloody discharge observed since from vulva; happy, hyd WNL, all parameters WNL. No concerns.
10/12/10	JE	Ginger and Marc Anthony for post blood draw for fasting studies. Base Pyrametamate 5mg/kg PO 4 th week deworming: Ginger = 406g; Rammy = 820g; Esperanza = 850g; Marc Anthony = 1115g.
10.13.10	MS	No vulvar d/c noted. all pups gaining adequate weight.
10/15/10	(W)	reported for soft feces. CH puppy BAR, Hyd: WNL. Ginger MM pink, Active. NSI. No tx @ this time.
10/18/10	WPC	Puppy BAR. normal feces. Lab is "forced feeding" the rabbit formula. 561g. gaining weight.

DAILY PROGRESS: -- ES



Animal ID No: Ginger
~~Marc Ant~~ Species: K9
 Investigator: Conlan Study #: _____

Please Include Day, Month And Year In Each Date And Initial All Entries

Date	Initials	— Procedures • Problems • Progress • Plans • Tests • Treatments —
11/22/10	JEM	Reported for vomiting + soft stool → she spit up twice during feeding @ 6:00pm she is OK, not very active. no concerns @ this time. lab is taking care of his case. vet as been notified
11/23/10	SF	Gave 0.1cc ranitidine PO @ 3:20am.
11/23/10	WBC	Reported for regurgitating. Dog OK. The report was for yesterday. Lab reporting 24 hrs. Puppy been used in fasting study by the time of examination. glucose = 73 lactates = 1.8 ; E-tube in place. more active than yesterday. Lab doing one more reading in 30 min. some soft stools. Normal urine. Will rev if reported. ^{met} Fecal sample collected
11/23/10	TX	Tox-prick to local draws for fasting study
11/24/10	GN	3 am: 0.1cc Ranitidine.
11/24/10	WBC	Ginger doing good. BME. gaining weight. from 1.19 kg to 1.24 kg today.
11/24/10	CT	3 pm: 0.1cc Ranitidine
11/25/10		3 am bandage change (LF)
11/25/10	NJF	Gave 0.1cc (1.5 mg) Ranitidine P.O. @ 2:55pm prior to E-tube feeding. Weight = 1.23 kg @ 3 pm
11/26/10	NJF	Gave 0.1cc (1.5 mg) Ranitidine PO @ 2:30pm. Weight = 1.36 kg Still having dark brown mucous diarrhea.
11/27/10	MS	Gave 0.1cc Ranitidine @ 2 P
11/27/10	CMR	bandage changed @ 10:30pm
11/28/10	CMR	0.1cc Ranitidine given @ 2 am
11/28/10	MS	0.1cc Ranitidine @ 2 P
11/29/10	SF	Gave 0.1cc Ranitidine via E-tube @ 2:00a
11/29/10	LF	7:30am bandage Δ'd - large scab; site cleaned w bandaid wash; neosporin added.

APPROVED

ABY 11/11/08

EXACT COPY: 28
 Initials: CRB
 4-18-08

DAILY PROGRESS - ES

Animal ID No: Ginger Species: Canine
Investigator: Conlan Study #:

Please Include Day, Month And Year In Each Date And Initial All Entries

Date	Initials	— Procedures • Problems • Progress • Plans • Tests • Treatments —
11/16/10	Ⓢ	Animal transported from VMC to PMS SX suite for scheduled surgery - portal vein injection for gene therapy, liver biopsy, & placement of feeding tube. See Anesthesia sheet for details.
11/16/10	LF	Shaking Glucose = 21mg/dL lactate = 7.0 1cc D50 orally given IV rate ↑ to 6.5ml/hr
11-16-10	MS	ventral midline incision. Wedge bx of L med lobe like crush w/ 3.0 PDS. Portal vein injection of ^{experimental} vector. Abdominal closure in 3 layers. Etube placed by AS. IOF. verified placement by fluoros. Dog not requintated not recovery, sl hypothermia. Sent back to spend night in UFVIM ICU, to be stepped down off of IV drip w/ oral.
11/19/10	LF	Changed E-tube bandage; requintated
11/18/10	R	Return from ICU at 6:00pm. ICU notes will be included in this record.
11-19-10	MS	Recent Summary: Dog transported (refused) to UFCHI for tx after seizure 11/10/10. SX for liver bx/gene tx injects done (see above) per research protocol. On recovery, returned to ICU. Returned to ACS housing 11/18/10 in PM on etube/oral feedings (see lab notes). Dog QAR today, incision CDI, SR scheduled 14 days postop. Lab providing care 24h/day per experimental protocol.
	MS	Requinted during tube feeding ~ 5 ⁴⁰ PM ~ 1cc ^{dilute opn 193} clove. Rec 0.9 T = 100.5 P = 180 R = 55. QAR, will stand + wag tail. AS contacted,