



PATIENT PRESENTING CLINICAL SIGNS

Harvee Phillips

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

12 Years

WEIGHT

4.37 kg

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

History: Presented for respiratory distress and open mouth breathing on Monday. Xrays showed possible lung mass, small amount of pleural effusion and ascites. Breathing improved the next day without any treatment. (initially owner was considering euthanasia). Yesterday and today she started eating. No current medications. IVF. No heart murmur. HR 150 RR 60. Concerned re: neoplasia? Owner considering treatment. Removed approx 25-30ml of pink tinged fluid at end of scan. Sending for Cytology.

Abnormal PE/Chem/CBC/UA Results: N/A

ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm)	LVIDd (cm)	LVWd (cm)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
PATIENT	--	212	0.54	1.91	0.56	32	65
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Sisson)	LA 2D 4-chamber long axis AS to FW (Sisson) (cm)	LVOT VEL. (m/s)	RVOT VEL. (m/s)	IVRT (m/)	
NORMAL PARAMETER	<1.5	0.88-1.79	0.7-1.7	<1.6	<1.3	40-60	
PATIENT	1.38	--	--	--	.80	NM	

Adapted from June Boon, Veterinary Echocardiography, 1998
Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate LA measurements. The cranial and caudal **mitral** valve leaflets presented normal linear structure and kinetics.. The **left ventricle** presented normal thicknesses with linear contour and was not dilated nor restricted. The **myocardium** presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. **Contractility** of the ventricular walls was adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions and angles of the myocardium. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinetics. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** tract assessment revealed normal valve structure, laminar flow, and diameter (approx.1:1 pa/ao ratio). Noncardiogenic pleural effusion was noted throughout the chest in this patient. A lung mass was noted in the heart base region with a large amount of pleural effusion. Nodular pleural changes were also present. The transdiaphragmatic view revealed areas of consolidated lung.

Urinary System

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Downtown AH

REFERRING VET

Dr. Ahn

INVOICE

16505

DATE

7/6/22



PATIENT

Harvee Phillips

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

SPECIES

Feline

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some moderate age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex. Slight pyelectasia was noted in the left kidney. The left kidney measured 3.28 cm. The right kidney measured 3.68 cm.

BREED

DSH

Adrenal Glands

SEX

Spayed Female

The regions of the **adrenal glands** revealed no evident pathology.

Spleen

AGE

12 Years

The **spleen** was mildly enlarged with uniform, but subtly micronodular parenchyma, and undulating capsular contour. This is consistent with reactive spleen owing to immune stimulus or early infiltrative disease such as mast cell disease or lymphoma. 25-gauge FNA would be ideal if weight loss is an issue to differentiate early round cell neoplasia versus splenitis or reactive spleen all of which can present in this manner.

WEIGHT

4.37 kg

Liver

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some age-related parenchymal remodeling was noted but likely not clinically significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented some dependent debris with essentially normal contour. The cystic and common bile ducts were normal. No overt evidence of active inflammatory, infiltrative or regenerative pathology was noted but should be paired with current or past LE elevations regarding any clinical significance to this presentation. The hepatic lymph nodes were unremarkable.

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Downtown AH

Gastrointestinal

The **stomach** itself was unremarkable. Variable intestinal thickening was noted with some areas of loss of mural detail.

REFERRING VET

Dr. Ahn

Pancreas

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

INVOICE

16505

Free Abdomen

The mesenteric **lymph nodes** were enlarged, rounded and hypoechoic, measuring up to 0.9 cm. Slight free fluid was noted in the abdomen.

DATE

7/6/22

ULTRASONOGRAPHIC FINDINGS



PATIENT

Harvee Phillips

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

12 Years

WEIGHT

4.37 kg

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Downtown AH

REFERRING VET

Dr. Ahn

INVOICE

16505

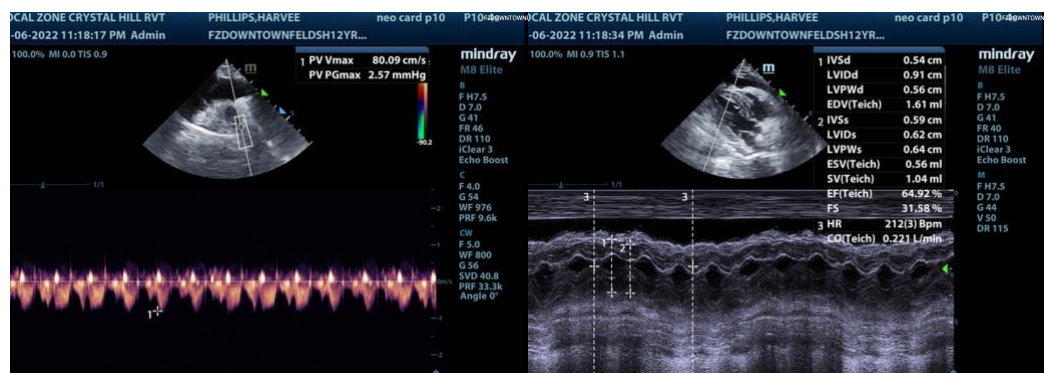
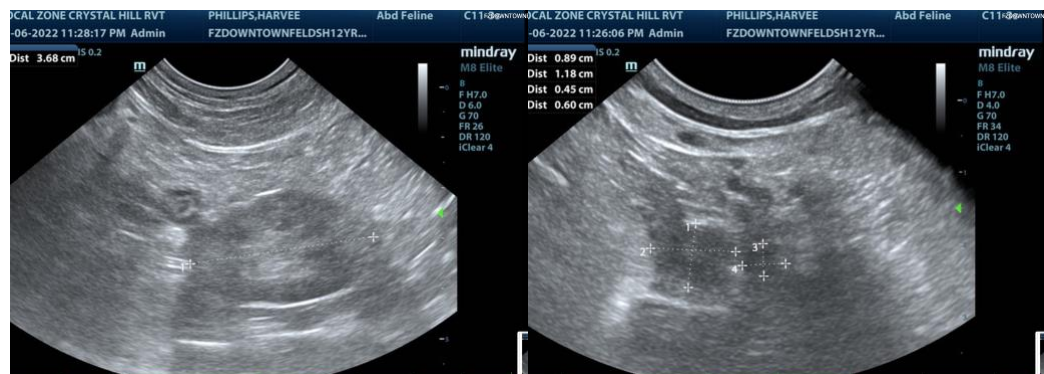
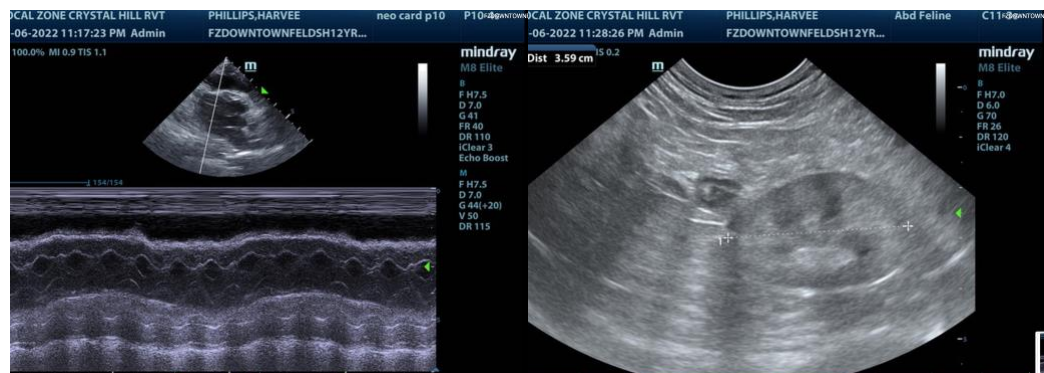
DATE

7/6/22

- No evidence of cardiac disease or volume overload
- Pleural effusion
- Nodular pleural changes
- Lung mass in the region of the heart base
- Age-related renal and hepatic changes
- Mesenteric lymphadenopathy with free fluid
- Scalloping spleen
- Variable intestinal thickening with some areas of loss of mural detail

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Pleurocentesis and cytospin warranted to assess for exfoliating neoplasia. Strong suspicion for thoracic carcinomatosis or lymphomatosis. FNA of the spleen +/- lymph nodes could also be considered. Treatment based on cytology results +/- chest CT after Pleurocentesis.





PATIENT

Harvee Phillips

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

12 Years

WEIGHT

4.37 kg

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

**IMAGING
PERFORMED BY**

Crystal Hill

HOSPITAL NAME

Downtown AH

REFERRING VET

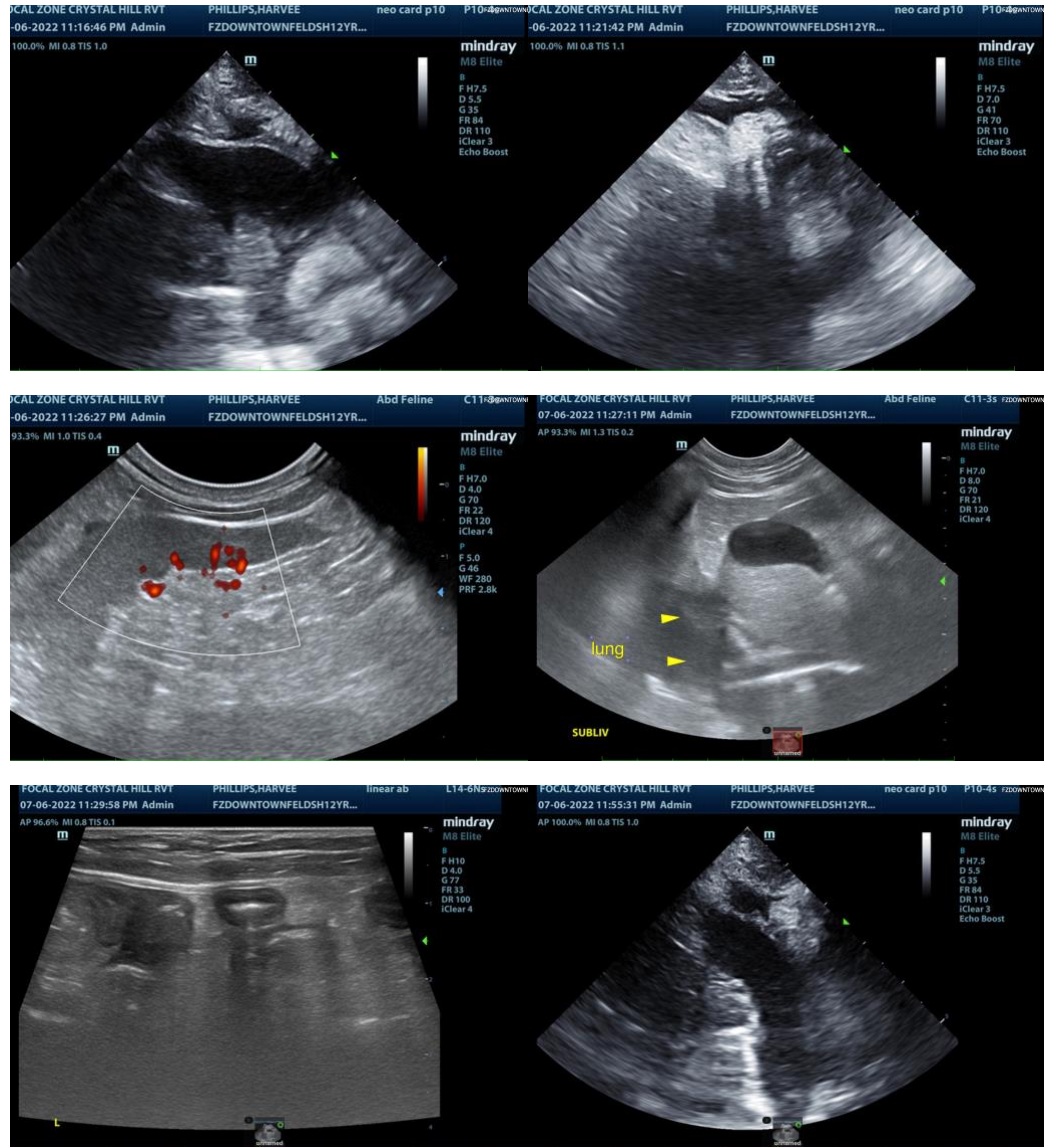
Dr. Ahn

INVOICE

16505

DATE

7/6/22



The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
Eric.Lindquist@SonoPath.com