IMAGING PERFORMED BY

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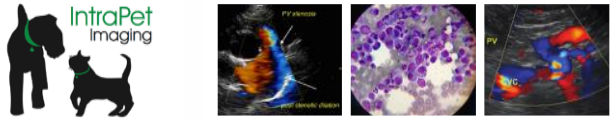

SonoPath
Clinical Sonography & Telecytology
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PATIENT
Charlie Fillmore

SPECIES
Feline

BREED
DSH

SEX
Male Neutered

AGE
4.1.17

WEIGHT
9.24lbs

INTERPRETED BY
Maggie Machen Lamy, DVM, DACVIM (Cardiology)

HOSPITAL NAME
Bayside Animal Medical Center

REFERRING VET
Dr. DeLozier

INVOICE
26156

DATE
9.1.22

PRESENTING CLINICAL SIGNS

History: Incidental murmur ausculted during annual- new onset.
-Current medications: None listed
-Sedation used: Not required to complete full diagnostic ultrasound.
-Pertinent previous ultrasound results: No previous.
-STAT: Not requested.
-Imaging performed by: Stephanie Warga RDCS, RVT.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is irregular with a focal septal thickening and a borderline free wall dimension. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles are mildly hypertrophied and hyperechoic. The endocardium also appears normal. The left atrium is normal in size. The right atrium is normal in size. The right ventricle appears normal. The mitral valve is normal in structure and mobility with no MR. No TR. Blood flow through the RVOT is normal. The blood flow through the LVOT is normal on doppler; however, an intermittent LVOTO is suspected on ancillary imaging. No pleural or pericardial effusion seen. No obvious cardiac tumors.

CARDIAC CHART

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LVWd (cm) (Moise, Pipers)	FS (%)	EF (%)
NORMAL PARAMETER	------	150-240	3.5-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	4.2	NM	0.73	1.3	0.53	49	84
FELINE CARDIAC PARAMETERS	**LA/AO** (Boon)	**LA/AO HEART BASE (Swe)** (Abbott)	**LA** 2D short axis Base view (cm) (Abbott)		**LVOT VEL** (m/s)	**RVOT VEL** (m/s)	**E max** **(m/s)**
NORMAL	<1.5	<1.3	<1.2		<1.6	<1.3	<0.9
PATIENT	NM	1.1	1.0		1.7	1.4	NM

Adapted from June Boon, Veterinary Echocardiography,1998
Abbott J & MacLean H JVIM 2006;20: 111-119, Moise et al. Am J Vet Res 47:1476, 1986. Pipers et al. Am J Vet Res 40:882, 1979.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The primary abnormality identified is focal LV hypertrophy in addition to LV remodeling, which may be indicative of early hypertrophic disease or may simply represent a normal variant. The LA is normal which would indicate clinical stability. Serial echocardiography will be necessary to determine progression and clinical significance. Additionally, the murmur is due to a mild LVOT obstruction, which appears intermittent and does not warrant therapy. No additional issues are identified.

Anesthetic risk is considered mild, however judicious IV fluid rates are advised to avoid fluid overload. Additionally, drugs that stimulate heart rate should be avoided unless clinically necessary (glycopyrrolate, atropine). Avoid vasodilators as this may worsen the obstruction. A reasonable protocol includes opioid/benzodiazepine premedication, propofol induction, isoflurane maintenance. Additionally, steroids should be used with caution on older cats, as even a 'normal' geriatric heart can develop evidence of intolerance and fluid retention.

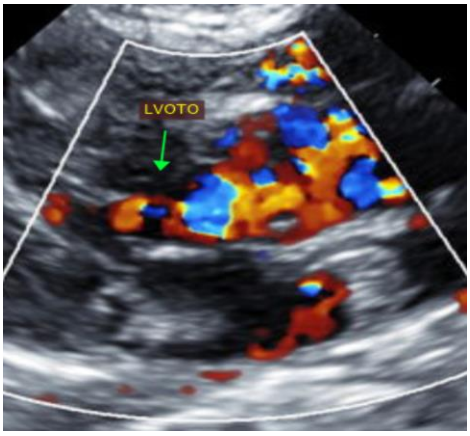
Monitor for any development of clinical signs, including labored breathing or signs of a blood clot (paralysis, neurologic change).

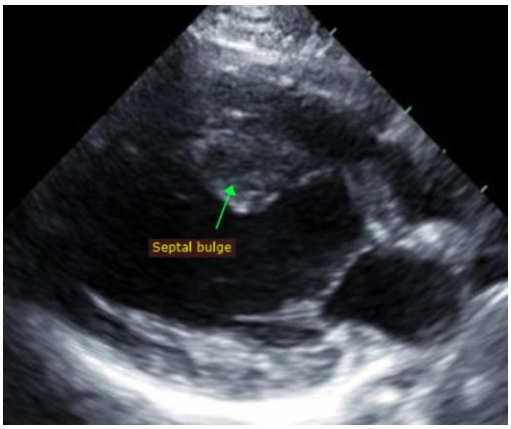
PLAN

BP and T4 should be monitored every 6 months.

A recheck echocardiogram is recommended in 6-12 months to screen for any evidence of progression.

IMAGES





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. This report was generated using transcription software, and minor dictation errors may be present. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

Maggie Machen Lamy, DVM
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