SWEDISH CHERRY HILL SCDIC ECHO
500 17TH AVE STE 630
SEATTLE WA 98122-5711
206-320-5353
Imaging Result Report

ECHO Complete

Patient:	Tomkinson, John George "Jack"	**Exam Date:**	08/16/2024 16:25
DOB:	1/26/1957	**Ordering Clinician:**	Anna Robyn Smith
MRN:	60007566543	**Reading Physician:**	Santanu Biswas, MD
Phone:	206-992-2779	**Reason:**	Afib / aflutter
Gender:	Male	**Indications:**	Other persistent atrial fibrillation (HCC)

Conclusion

- Left ventricle size is normal. Mildly increased wall thickness. Normal systolic function. LV EF is 60%, assessed by modified Simpson's biplane. Left ventricle stroke volume index is 29 mL/m2. Normal wall motion. There is normal left atrial pressure and grade I left ventricular diastolic dysfunction.
- Right Ventricle: Right ventricle size is normal. Lead present in the right ventricle. Normal systolic function.
- Mild bi-atrial enlargement. Lead present in the right atrium.
- No significant valvular abnormalities.
- Aorta: Mildly enlarged ascending aorta. Normal sized sinus of Valsalva. Ascending aorta is 4 cm.
- No pericardial effusion.

Comparison

Prior Study

Prior stress echo study available for comparison. Prior study date: 12/17/2018.

Study Details

Study Details
•A complete transthoracic echocardiogram was performed.
•Standard views were obtained.

•Overall image quality was fair.
•The study was technically adequate.
•The predominant underlying rhythm was ventricular paced.

•Height: 172 cm
•Weight: 84.4 kg
•Body Surface Area: 1.9762 m2
•Body Mass Index: 28.5289 kg/m2
•Blood pressure: 164 / 105 mmHg
•Heart rate: 65 bpm

Findings

Left Ventricle
Left ventricle size is normal. Mildly increased wall thickness. Normal systolic function. Left ventricle stroke volume index is 29 mL/m2. Normal wall motion. There is normal left atrial

Findings (continued)

	pressure and grade I left ventricular diastolic dysfunction.
Ejection Fraction	LV EF is 60%, assessed by modified Simpson's biplane.
Right Ventricle	Right ventricle size is normal. Lead present in the right ventricle. Normal systolic function.
Left Atrium	Left atrium is dilated. Left atrial volume index is 39 mL/m2.
Right Atrium	Right atrium is mildly dilated. Right atrial area is 19 cm2. Lead present in the right atrium.
Aortic Valve	Valve structure is tricuspid. Mildly thickened cusps. Mildly calcified cusps. No regurgitation. No stenosis.
Mitral Valve	Valve structure is normal. Trace regurgitation. No stenosis.
Tricuspid Valve	Valve structure is normal. Trace regurgitation. No stenosis.
Pulmonic Valve	Valve structure is normal. No regurgitation. No stenosis.
Great Vessels	Mildly enlarged ascending aorta. Normal sized sinus of Valsalva. Ascending aorta is 4 cm.
IVC/SVC	IVC size is normal.
Right Sided Pressures	The IVC diameter is </=21 mm with a <50% collapse with inspiration suggesting a right atrial pressure of 8 mmHg. The right atrial pressure is intermediate. Unable to assess right ventricular systolic pressure due to the lack of measurable tricuspid regurgitation.
Pericardium	No pericardial effusion.

Aortic Valve Measurements

AV General		LVOT	
AV peak vel	**116 cm/s**	LVOT peak vel	**95 cm/s**
AV VTI	**20.5 cm**	AV LVOT Peak Gradient	**4 mmHg**
AV peak gradient	**5 mmHg**	AV LVOT Mean Gradient	**2 mmHg**
AV mean gradient	**3 mmHg**	LVOT peak VTI	**16.8 cm**
Aortic Valve Area by Continuity VTI	**2.7847 cm2**	LVOT diameter	**2.08 cm**
AV DVI	**0.819**	LVOT Mean Velocity	**67.1 cm/s**
AV Mean Velocity	**80.5 cm/s**		

Mitral Valve Measurements

MV General		MV Tissue Doppler	
MV Peak E-Wave	**40.7 cm/s**	MV E' Septal Velocity	**3.3 cm/s**
MV Peak A-Wave	**59.1 cm/s**	MV E' Lateral Velocity	**7.1 cm/s**
MV E/A Ratio	**0.6887**	MV E/E SEPTAL	**12.3**
MV Deceleration Time	**251 msec**	MV E/E LATERAL	**5.7324**

Pulmonic Valve Measurements

PV General	
PI Peak Velocity	**100 cm/s**
PV peak gradient	**4 mmHg**

Pulmonic Valve Measurements (continued)

PV Acceleration Time	**69 msec**

Left Ventricle Measurements

LV Dimension	
LVIDd	**4.7 cm**
LV Systolic Diameter MM	**3.1 cm**
IVS Diastolic Thickness MM	**1.2 cm**
LVPW Diastolic Thickness MM	**0.97 cm**
LVOT diameter	**2.08 cm**

LV Function	
LVEF-TTE TRANSTHORACIC ECHO	**60 %**
LV Simpson's Biplane EF	**60 %**
Teicholz Ef Calc	**63 %**
Stroke Volume	**57 ml**
Stroke Volume Index	**29 ml/m2**
Cardiac Output	**3.7106 l/min**
Cardiac Index	**1.8776 l/min/m2**
FS	**34 %**

LV Volume/Area	
LV ED Volume (Simpson's)	**64.7 ml**
LV ES Volume	**26.2 ml**
LV ED Volume Index	**32.7396 ml/m2**
LV ES Volume Index	**13.2578 ml/m2**
LV Diastolic Volume MOD 2C	**68.8 mL**
LV Diastolic Volume MOD 4C	**58.9 mL**
LV Systolic Volume MOD 2C	**29.2 mL**
LV Systolic Volume MOD 4C	**22.8 mL**
LV Area Diastolic	**25.2 cm2**
LV Systolic Area PSAX	**15.1 cm2**
LV mass AL	**183.9892 g**
LV Mass Index	**93.1025 g/m2**
LV Diastolic Length 4C	**8.01 cm**

Right Ventricle Measurements

RV Size	
RV Base	**3.1 cm**
RV Diastolic Length	**7.1 cm**
RV Diastolic Mid Diameter	**3 cm**
RV Diastolic Area	**17.6 cm2**
RV Systolic Area	**9.4 cm2**

RV Function	
TAPSE	**1 cm**
RV Fractional Area Change	**46.5909 %**

Left Atrium Measurements

Left Atrium General		LA Major	**6.2 cm**

Left Atrium Measurements (continued)

LA Area	**23.1 cm2**
LA volume	**77.8 mL**
LA Volume Index	**39 mL/m2**

Right Atrium Measurements

Right Atrium General

RA Area	**19 cm2**
RA Minor	**4.7 cm**
RA Major	**4.97 cm**
RA Volume	**57 ml**
RA Volume Index	**29 ml/m2**

Great Vessels Measurements

Aorta

Aortic Root Diameter	**3.5 cm**
Ascending aorta	**4 cm**

Signing Physician

Signing Physician: Santanu Biswas, MD on 8/16/2024 7:04 PM