Pacific Heart Centre
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Pacific Heart Centre

TRANSTHORACIC ECHOCARDIOGRAM REPORT

Patient:	**RIGGS KEVIN**	Height	177 cm
Patient ID	11586	Weight	92 kg
Date of birth:	14/07/1945 (79 years)	BSA:	2.09 m^2
Gender:	Male	BMI:	29.37 kg/m^2
Exam date:	8/08/2024	Sonographer:	Nicole Coutanche (ASAR 9681)
Location:	Maitland	Referal:	Dr. Andrew Hill

Indication AVR 2011, AF, LBBB

Conclusions

1. Normal size left ventricle with low normal systolic function. Calculated LVEF 50 %. Average global longitudinal strain value -12 %. Mild concentric left ventricular hypertrophy. Grade II (of IV) diastolic dysfunction. Elevated filling pressures.
2. Normal right ventricular size with normal systolic function.
3. Severely dilated left atrium.
4. Bioprosthetic aortic valve with mild to moderately elevated transvalvular pressure gradients. Increased AV gradients compared to study performed in July 2023.
5. Mild tricuspid valve regurgitation.
6. Normal pulmonary artery pressure at rest (PASP 31 mmHg).
7. Sinus bradycardia (HR 50 bpm).

Rhythm	Sinus bradycardia (HR 50 bpm) with a wide QRS complex
Left Ventricle	Normal left ventricular size with low normal systolic function. Calculated left ventricular ejection fraction is 50 % ([52-72]). Mild concentric left ventricular hypertrophy. Grade II (of IV) diastolic dysfunction. Elevated filling pressures.
Right Ventricle	Normal right ventricular size (RV Base 4.1 cm [2.4-4.2]) with normal systolic function (RV S' 13 cm/s [>=10]).
Left Atrium	Severely dilated chamber (52.1 ml/m^2).
Right Atrium	Normal size chamber (30.7 ml/m^2).
Atrial Septum	Normal interatrial septum. No obvious shunt flow on Colour Doppler.
Aortic Valve	Bioprosthetic aortic valve with moderate stenosis. Most anterior leaflet appears calcified. Trivial aortic regurgitation.
Mitral Valve	Mildly calcified leaflets with normal excursion. No mitral stenosis. Mild mitral regurgitation.
Tricuspid Valve	Normal leaflets. Mild tricuspid regurgitation.
Pulmonary Valve	Normal valve structure. Trivial pulmonary regurgitation. Normal RVOT Doppler profile (Pulm acc. time 93 ms).
Pericardium	Normal pericardium with no pericardial effusion.
Aorta	Normal size aortic root (3.5 cm). Mildly dilated proximal ascending aorta (3.5 cm). Aortic arch not well visualised.
IVC	Dilated IVC (22.1 mm) with normal respiratory collapse. RAP 8 mmHg.
Measure	**M mode** TAPSE 1.5 cm

	[>=1.7]				

2D mode

IVSd	1.2 cm	LVESV (Auto EF A2C)	54.3 ml	RV mid	2.7 cm [1.9-3.5]
LVIDd	5.1 cm [4.2-5.8]	LVSV (Auto EF A4C)	37.5 ml	LAESVI (A-L)	52.1 ml/m²
LVIDs	3.9 cm [2.5-4.0]	LVSV (Auto EF A2C)	55.3 ml	LAESVI (MOD BIP)	49 ml/m²
LV FS	25 %	LVEF (Auto EF A4C)	46 %	RAESV (MOD)	64.1 ml
LVPWd	1.2 cm	LVEF (Auto EF A2C)	50 %	LVOT Diam	2.2 cm
LVEF (Teich)	49 %	LVEF (MOD BIP)	50 % [52-72]	Sinus. of Valsalva Diam	3.5 cm [3.1-3.7]
LVEDV (Auto EF A4C)	82.0 ml	IVC	22.1 mm	Ao st junct Diam	2.7 cm [2.6-3.2]
LVEDV (Auto EF A2C)	109.6 ml	RV basal	4.1 cm [2.4-4.2]	Ao Asc Diam	3.5 cm [2.6-3.4]
LVESV (Auto EF A4C)	44.5 ml				

Doppler

MV E Velocity	1.05 m/s	LVOT SVI	56.5 ml/m²	TR max PG	22.64 mmHg
MV E / A	0.89 [0.6-1.32]	AV Vmax	3.31 m/s	RAP	8.00 mmHg
MV Dec. Time	277 ms [142-258]	Dimensionless Index	0.33	RVSP	31 mmHg
MV Vmax	1.11 m/s	AV max PG	43.90 mmHg	PV Vmax	1.52 m/s
MV mean PG	1.77 mmHg	AV mean PG	27.34 mmHg	PV Vmean	0.99 m/s
MV VTI	54.4 cm	AVA (Vmax)	1.2 cm²	PV max PG	9.22 mmHg
MVA (VTI)	2.2 cm²	AVA (VTI)	1.3 cm²	PV mean PG	4.61 mmHg
MV HR	44 bpm	AVAI (VTI)	0.6 cm²/m²	PV Acc. Time	93 ms
LVOT Vmax	1.08 m/s	LV HR	50 bpm	P Vein S / D	1.46
LVOT max PG	4.65 mmHg	TR Vmax	2.38 m/s		

TDI

MV E' Sept	4 cm/s [6-15]	MV E / E' Lat	13.5	MV E / E' Avg	17.3
MV E / E' Sept	24.1	MV E' Avg	6 cm/s	TV S'	13 cm/s [>=10]
MV E' Lat	8 cm/s [6-20]				

2D Strain

GLPS avg (AFI)	-12 %

Other

Ao sinus Ind	1.66 cm/m2	LVCO 4Ch Q	2.26 l/min	LVLd 2Ch Q	7.9 cm
Ao st junct Ind	1.31 cm/m2	LVLs 4Ch Q	7.2 cm	LVVED BiP Q	95 ml
Ao asc Ind	1.70 cm/m2	LVLd 4Ch Q	8.0 cm	LVVES BiP Q	48 ml
RAESV Ind	30.66 ml/m2	HR 2Ch Q	61 BPM	LVSV BiP Q	47 ml
ePLAR	0.14	LVCO 2Ch Q	3.38 l/min	LVCO BiP Q	2.82 l/min
LVOT Env.Ti	390 ms	LVLs 2Ch Q	7.0 cm	LA Length Diff	-0.3 cm
HR 4Ch Q	60 BPM				

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Sonographer

CC: Dr. Alfred Oringo