Royal North Shore Hospital

Health Northern Sydney Local Health District

Department of Cardiology
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Transthoracic Echocardiography (TTE) Study

Procedure date/time:	20/06/2025 1:47 PM	**Accession no:**	RNS-ECHO-25-3742
Patient name:	RIGGS Kevin Ronald	**Patient ID:**	2357855
Date of birth:	14/07/1945	**Age:**	79 year(s)
Height:	180 cm	**Gender:**	Male
Weight:	95 kg	**BSA:**	2.1 m²

Procedure Staff

Referring Physician:	Dr Peter Hansen	**Sonographer:**	Kylie Sin Paramjit Kaur Bulbir Singh
Interpreting Physician:	Dr Fred Nasser		
Advanced Trainee:	Dr Mark Ishak		

Proc. sub type: TTE procedure

Indications

Pre-TAVI.
MBS Code: 55127 - valvular dysfunction (serial)

Procedure Information

HR:	62 bpm	**Source:**	Outpatient
Rhythm:	Normal sinus rhythm	**Study location:**	Echo lab 1
Image quality:	Adequate visualization	**Specialty:**	Cardiology

Measurements

Dimensions

Sinus of Valsalva:	3.5 cm	LV Internal Dimension (end dias):	5.3 cm
Sinus of Valsalva index:	1.94 cm/m	LV Internal Dimension (end sys):	4 cm
Septal Thickness:	1.2 cm	RA area:	21.9 cm²
Post LV Wall Thickness:	1.2 cm	RA volume index:	30.5 ml/m²
LA area:	29.8 cm²		

Aortic Valve		Mitral Valve	
AV Peak velocity:	3.7 m/s	MV Peak E-wave:	0.98 m/s
AV Peak gradient:	54.8 mmHg	MV Peak A-wave:	1.08 m/s
AV Mean gradient:	33 mmHg	Lateral E' velocity:	0.071 m/s
AV VTI:	98.4 cm	Septal E' velocity:	0.032 m/s
LVOT diameter:	2.2 cm	E/E' lateral:	13.8
LVOT peak velocity:	1 m/s	E/E' septal:	30.25
LVOT VTI:	21.5 cm	E/E' average:	22.02
AVA (Continuity):	0.8 cm²	**Tricuspid Valve**	
AVA Indexed:	0.4 cm²/m²	TR velocity:	2.3 m/s
SV Indexed:	38.1 ml/m²	IVC Max:	1.3 cm
Right Ventricle			
TAPSE:	1.8 cm		
RV s' velocity:	0.107 m/s		
RV basal diam:	4.4 cm		
RV mid diam:	3.4 cm		

Procedure Summary

Summary:

Severe bioprosthetic aortic stenosis. Severe Global cardiomyopathy. Marked LA dilatation. Normal RV size and function

Findings (Rest)

Left Ventricle:	Normal left ventricular chamber size and mildly increased wall thickness. Severely impaired systolic function with severely hypokinetic septum and moderate hypokinesis elsewhere. Ejection fraction estimated at 30%.
Right Ventricle:	Normal RV size. Normal systolic function.
Left Atrium:	Severely dilated left atrium.
Right Atrium:	Normal right atrial size.
Aortic Valve:	Bioprosthetic aortic valve in situ. Turbulent flow and increased flow velocities through prosthesis consistent with moderate-severe stenosis. Peak flow velocity 3.7 m/s measured from apical view, predicting a peak instantaneous pressure gradient of 54.8 mmHg and a mean pressure gradient of 33 mmHg. AcT 143ms, DVI 0.22, AVAi 0.4cm2/m2.
Aorta:	Normal aortic root (3.5cm) and ascending aorta size (3.5cm).
Mitral Valve:	Mildly thickened mitral leaflets with severe posterior mitral annular calcification. Normal leaflet excursion (MG 3mmHg). Mild mitral regurgitation.
Tricuspid Valve:	Normal tricuspid valve structure. Normal leaflet excursion. Trivial tricuspid regurgitation.
Pulmonary Valve:	Normal pulmonary valve structure and function. Normal valvular opening.
Pericardium & Pleura:	Small echo-free space adjacent to the right atrium and right ventricle.
Septa & Shunts:	No shunt detected by colour Doppler examination. No atrial septal aneurysm detected.
Additional Findings:	Normal IVC size with normal inspiratory collapse (estimating RAP 3mmHg).

Electronically signed by Dr Fred Nasser (Interpreting Physician) on 20/06/2025 at 4:29 PM