



CARDIAC HEALTH INSTITUTE

Transthoracic Echocardiogram

Name: BIRCH, Michael **MRN:** 40350 **DOB:** 24/04/1992
Date: 30/09/2021 12:50 **Referring Dr:** Andrea Peiser
Sonographer: S Huynh **Image Quality:** Good
Indication: Recent chest pains., ? Pericarditis **Ht:** 181 cm **Wt:** 73 kg
Study BP: 120 / 70 **ECG:** Sinus rhythm **BSA:** 1.92 m²

M-MODE / 2-D

Body Surface Area	1.9 m ²	LV Mass Index	77.3 g/m ²
LV Diastolic Diameter	4.6 cm	LVOT Diameter	2.3 cm
LV Diastolic Diameter Index	2.4	Aortic Root Diameter	3.1 cm
LV Systolic Diameter	3 cm	Aortic Root Diameter Index	1.6
LV Systolic Diameter Index	1.6	Ascending Aorta Diameter	2.7 cm
Fractional Shortening	0.35	Aortic Arch Diameter	2.8 cm
EF Teich	64 %	LA Systolic Diameter	3.6 cm
IVS Diastolic Thickness	0.9 cm	LA Systolic Diameter Index	1.9
LVPW Diastolic Thickness	1 cm	LA Area	17.3 cm ²
Relative Wall Thickness	0.41	RA Area	16.3 cm ²

DOPPLER

AV Peak Velocity	1.3 m/s	MV Deceleration Time	187 ms
AV Peak Gradient	6.4 mmHg	Em Septal Velocity	14.2 cm/s
LVOT Peak Velocity	0.86 m/s	Em LV Lateral Velocity	14.4 cm/s
LVOT Peak Gradient	3 mmHg	E to Em Septal Ratio	7.5
LVOT Mean Gradient	1 mmHg	TR Peak Velocity	2.2 m/s
LVOT Velocity Time Integral	17.3 cm	TR Peak Gradient	18.7 mmHg
LVOT AV Vel Ratio	0.69	PV Peak Velocity	1.1 m/s
Mitral E Point Velocity	1.1 m/s	PV Peak Gradient	4.6 mmHg
Mitral E to A Ratio	1.8		

Aortic Valve	Normal trileaflet aortic valve with normal Doppler flow. Normal aortic root, ascending and arch size. No regurgitation detected.
Mitral Valve	Structurally normal mitral valve with normal Doppler flow. No regurgitation detected.
Tricuspid Valve	Structurally normal. There is trivial regurgitation. From the TR velocity, the estimated systolic pulmonary artery pressure is 24mmHg.
Pulmonary Valve	The pulmonary valve is normal with normal Doppler flow. Trivial regurgitation.
LV	Normal left ventricular chamber size, wall thickness and systolic function. No regional wall motion abnormalities. Normal Doppler parameters of diastolic function.
RV	Normal right ventricular chamber size and systolic function. Normal RV TAPSE ~24mm.
Atria	Normal sized atria (LA volume indexed is 26ml/m ² - normal < 34ml/m ²). No evidence of a patent foramen ovale by colour Doppler.
Pericardium	Normal pericardium. There is no evidence of pericardial thickening, no effusion.

CONCLUSION	Normal LV and RV dimensions, overall and regional systolic function. Estimated LVEF 65%. Normal biatrial dimensions. Normal valvular structure and function. Normal estimated pulmonary systolic pressures. Normal pericardium appearance, no pericardial effusion.
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Electronically verified by Professor Hosen Kiat