DR CHRISTOPHER NEIL MBBS FRACP PhD
Cardiologist and Cardiac Imaging Specialist
www.drchrisneil.com

HeartWise
1300 870 772 Fax 03 8679 0579
58A Whitehorse Rd Deepdene VIC 3103

Monday, 4th March 2024

Dr Neel ROY
Cornwall Street Medical Centre
WOOLLOONGABBA QLD 4102 Fax:

Dear Neel ,

RE: Mr Edward Steele DOB 27/10/1948 UR
Unit 2 , 102 Duke Street, KANGAROO POINT QLD 4169 MC no. 2900 50077 9/3 Mob. 0420863551

PROBLEMS

Severe calcific aortic stenosis detected in September 2021
- No obvious symptoms impairing daily activities
- Daily walk and exercise without difficulty: NHYA I
- TTE (Nov 2021): DVI 0.23 with MG 53mmHg, RVSP 38mmHg
- CT aortic valve calcium score 5920 (2022)
- Stress echo (2022): 9 min on Bruce protocol, 106% MPHR 10 METs (age-expected 8.4 METs)

Mechanical fall mid 2023 with head injury
- Unwitnessed but uneven footpath and severe facial trauma/bruising

MEDICATIONS

Qvar (Beclomethasone 100 ug inhaler)
- one bd

Fess Nasal Spray
- 2 sprays nocte

Allergies: none reported

Inactive:
Mastoid surgery (1960), Asthma precipitated by thunderstorms, Nasal congestion, Resected skin cancers (2021) — PMCC for BCC excised from ear, Dental problems, Former heavy smoker from 1964 until 1981

It was a pleasure to meet Mr. Steele and review his case. I thank you for your referral. I have not previously known him in the context of medical care, but he was previously seen by my colleague, Dr. Mark Nolan, in the same practice in Melbourne, in 2022. He was supposed to be handed over to another cardiologist, but this transition did not take place before Mr. Steele moved up North to live with his son.

Around the middle of last year, before making the move, he had a serious incident - a mechanical fall while walking on a street in the South Eastern suburbs. He lost consciousness, but believes this was due to impact rather than a primary syncopal event. There was an uneven footpath around the site of his fall. The hospital staff at The Alfred were interested in his harsh ejection systolic murmur and known severe aortic stenosis, as potential causes of his fall, but despite this tended to agree it was mechanical. He is thankfully fully recovered from his injuries, which included serious facial bruising.

We discussed his major problem of asymptomatic severe calcific aortic stenosis in some detail. There is absolutely no doubt regarding the hemodynamic severity as of late November 2021. I explained that a mean gradient over 40 mmHg usually qualifies for severe aortic stenosis, and that his being 53mmHg almost two years ago more than meets that cut-off.

The question now is what to do about it: Mr. Steele has previously been counselled regarding the options, including referral for (i) aortic valve replacement surgery, (ii) referral for transcatheter aortic valve replacement (TAVI; also referred to as Transcatheter Aortic Valve Replacement or TAVR), or (iii) watchful waiting. Of these, he much prefers watchful waiting.

In this situation, I recommend echocardiograms every six to twelve months, although it has been longer than this since Mr. Steele's last echocardiogram. Potential triggers to recommend AV intervention include a reduced LVEF or an elevated PA systolic pressure.

I further explained that TAVI is increasingly the norm in symptomatic aortic stenosis in individuals over 65 years of age and, in asymptomatic individuals, is also increasingly utilised, with a growing evidence base. I think this is likely what Mr. Steele will ultimately undergo. He understands well that risks are involved, including stroke, heart attack, death and local bleeding complications.

In light of his excellent functional capacity, the possible need to intervene has understandably been challenging for Mr. Steele to grasp. I believe he is currently fitter than he was 18 months ago, often walking 14km in hilly terrain. Given that he is now in Brisbane, I feel the procedure should be undertaken in a practice. He is not hypertensive, but described a systolic BP rising from about 120mmHg to 140mmHg with exercise, which may represent a slightly blunt exercise BP response.

All of this was discussed with Mr. Steele, but for now, I have provided him with a request for an echo and for blood tests. I look forward to seeing him in the weeks after these have been completed. Please do not hesitate to inquire if there are any further queries.

Kind Regards

Dr Christopher Neil

cc:
Mr Edward Steele, Unit 2 , 102 Duke Street, KANGAROO POINT QLD 4169

PS. I have appended his 2021 Echo Report for reference.

VICTORIA HEART

Windsor
54 The Avenue Windsor 3181

East Melbourne
132 Grey Street East Melbourne 3002

Tel 03 **9510 9020**
Fax 03 **9923 6627**

www.victoriaheart.com.au
info@victoriaheart.com.au

Transthoracic Echocardiogram Report

Name: **Edward STEELE** Test Date: 03/11/2021
Address: 14/35a Grandview Gve, Prahran DOB: 27/10/1948
Referrer: Dr Charles Bush
Clinical: Systolic murmur FI - ?Aortic stenosis severity.

CONCLUSIONS

1. Severe calcific aortic stenosis.
2. Mild concentric LV hypertrophy with normal LV ejection fraction.
3. Moderate left atrial dilatation.
4. Mild calcific mitral stenosis.
5. Upper normal pulmonary pressure.
6. Small pericardial effusion.

Tech: S Stevenson	*Quality:* Good	*BSA:* 2.05	*BMI:* 28	*HR* 95	*Rhythm:* SR	*BP* 134/70

Left Ventricle (LV) Diastole	45	mm		**Aortic Root**	37	mm	
LV Diastole Indexed	22	mm/m²	<31	**Aortic Root Indexed**	18	mm/m²	<21
LV Septum	16	mm		**Ascending Aorta**	36	mm	
LV Posterior Wall	11	mm		**Left Atrial Area**	28	cm²	
LV Mass Indexed	117	g/m²		**Left Atrial Volume Indexed**	53	ml/m²	<34
LV Relative Wall Thickness	49	%	<43	**Right Atrial Area**	22	cm²	
LV Ejection Fraction	70	%		**Inferior Vena Cava**	20	mm	

	Velocity (m/s)	Gradient Peak (mmHg)	Gradient Mean (mmHg)	VTI (cm)	Regurgitation	PHT (ms)	Valve Area (cm²)
LV Outflow Tract	1.0			23			
Aortic	4.5	82	53	99	Trivial		
Mitral	1.1				Trivial-Mild		
Pulmonary	0.8				Trivial		
Tricuspid	-				Trivial		

Mitral Valve	E wave	1.1 m/s	A wave	1.7 m/s	DT	399 ms	Mean E/e'	27
Annular Velocities	Septal e'	3 cm/s	Lateral e'	5 cm/s	RV s'	cm/s	TAPSE	2.1 cm
Tricuspid Valve	TR V_{max}	2.7 m/s	RVSP	30 mmHg + RAp				

Left Ventricle: Normal size. Mild concentric hypertrophy with basal septal bulge. Normal ejection fraction (visual: 70%), no regional hypokinesis. Indeterminate estimated filling pressure (mitral pathology).

Right Ventricle: Normal size, wall thickness and contraction.

Atria: Moderately dilated left atrium. Mildly dilated right atrium. No Doppler evidence of interatrial shunt.

Mitral Valve: Moderate posterior annular calcification with encroachment into the base of the leaflets. Leaflet tips are thin and mobile with mild chordal SAM noted. Mild stenosis by Doppler (mean gradient= 5 mmHg at HR 81 bpm). Trivial to mild regurgitation.

Aortic Valve: Trileaflet with thickened, calcified leaflets and severely restricted opening. Severe stenosis by Doppler (mean gradient= 53 mmHg, DI= 0.23). Trivial regurgitation.

Aorta: Normal aortic root, proximal ascending aorta and aortic arch (29 mm).

Tricuspid Valve: Normal.

Pulmonary Valve: Normal.

Pulmonary Pressure: Upper normal estimated pulmonary pressure (RVSP=38 mmHg, assuming RA pressure=8 mmHg).

Inferior Vena Cava: Normal diameter and normal forced inspiratory collapse consistent with normal right atrial pressure.

Pericardium: Small pericardial effusion adjacent to right atrium with mild diastolic right atrial free wall inversion.

Cardiologist: **A/Prof Arthur Nasis**