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## **Transthoracic Echocardiogram Report**

| Patient     | MOONEY, GRAHAME ME00465771 |        |       |     |          | Date              | 25-06-2025 |
|-------------|----------------------------|--------|-------|-----|----------|-------------------|------------|
| DOB         | 31-12-1942                 | Sex    | M     |     |          | Patient ID        | GM311242   |
| Referred by | Prof Ravinay Bhi           | ndi    |       |     | Study ID | A2545/25          |            |
| Height      | 1.75 m                     | Weight | 80 KG | BSA | 1.96 m2  | Heart rhythm/rate | SR 60/min  |
| Indication  | TAVI work-up               |        |       |     |          |                   |            |

## Measurements

| LV/Atrial Chamber Size |          | Diastology  | Diastology      |                | RV Function/Pulmonary HTN |            | Aortic Valve |  |
|------------------------|----------|-------------|-----------------|----------------|---------------------------|------------|--------------|--|
| LVIDd:                 | 4.6 cm   | E vel:      | 58 cm/s         | RVS':          | 15 cm/s                   | AV Vmax:   | 334 cm/s     |  |
| LVIDs:                 | 2.8 cm   | Decel time: | -               | TAPSE:         | 20 mm                     | AV PG:     | 45 mmHg      |  |
| IVSWd:                 | 1.3 cm   | A vel:      | 93 cm/s         | RV Frac:       | -                         | AV MG:     | 25 mmHg      |  |
| LVPWd:                 | 1.3 cm   | E/A:        | 0.6             | PAAT:          | -                         | AV VTI:    | 76.1 cm      |  |
| LA size:               | 4.4 cm   | E' sept:    | 3.7 cm/s        | RV Base:       | -                         | LVOT Vmax: | 79 cm/s      |  |
| EF BP:                 | 62 %     | E' lateral: | 3.8 cm/s        | RV Mid. :      | -                         | LVOT VTI:  | 20.2 cm      |  |
| LA Area:               | 21 cm2   | E/E' avg:   | 15.5            | RV Length:     | -                         | AVA VTI:   | 0.82 cm2     |  |
| LA Vol Ind:            | 34 ml/m2 |             |                 | TR Vmax:       | 2.4 m/s                   | AVAi:      | 0.42 cm2/m2  |  |
| RA Area:               | 17 cm2   |             |                 | RVSP-RA:       | 24 mmHg                   | SVi:       | 32 mL/m2     |  |
| GLS:                   | [-]      |             |                 | IVC:           | -                         | DVI        | 0.23         |  |
|                        |          |             |                 | Collapse=>50%: | [Yes/No]                  |            |              |  |
| Mitral Valve Aorta     |          |             | Tricuspid Valve |                | Pulmonary Valve           |            |              |  |
| MV MG:                 | -        | LVOT Diam:  | 2.0 cm          | TV MG:         |                           | PV Vmax:   | 89 cm/s      |  |
| PHT:                   | -        | AoRD:       | 3.9 cm          | TV pk E:       |                           | PV PG:     | 3 mmHg       |  |
| MVA (PHT):             | -        | Asc Aorta:  | 3.6 cm          |                |                           | Qp:Qs      |              |  |
|                        |          | Arch:       | -               |                |                           |            |              |  |

## Comments

| Left Ventricle    | Normal left ventricular size and systolic function. Left ventricular ejection fraction estimated at around 65%. No segmental abnormality detected.  |
|-------------------|---|
| LV Wall Thickness | Mild concentric left ventricular hypertrophy.   |
| Right Ventricle   | Normal right ventricular chamber size and systolic function.  |
| Left Atrium       | Mildly dilated left atrium.   |
| Right Atrium      | Normal right atrial size.   |
| Aortic Valve      | Trileaflet aortic valve. Markedly thickened and calcified leaflets. Markedly restricted valve opening on 2D (eg clips 26, 27). Doppler data as in table above. Moderate systolic pressure gradient. Calculated valve area in the severe range. Findings consistent with low flow low gradient paradoxical severe aortic stenosis with normal LVEF. SVI 32 ml/m2, DVI 0.23. Mild aortic regurgitation. |
| Mitral Valve      | Mild posterior mitral annular calcification. Structurally normal mitral leaflets. Trivial mitral regurgitation within normal limits.  |
| Tricuspid Valve   | Normal tricuspid valve structure. Mild tricuspid regurgitation.   |
| PASP              | PASP ~27 mmHg assuming RA pressure of 3 mmHg. Normal pulmonary artery systolic pressure.  |
| Pulmonary Valve   | Normal pulmonary valve structure and function.  |
| Aorta             | Mildly dilated aortic root. Normal ascending aortic size.   |
| Pericardium       | No pericardial effusion.  |
| Additional Notes  | No mass seen. No shunt detected with colour Doppler evaluation. No atrial septal aneurysm.  |

## **Conclusions**

- Pacing leads in the right heart. Atrial sensing or pacing with probable native ventricular conduction 60/min.
- Normal left ventricular size and systolic function. Left ventricular ejection fraction estimated at around 65%. No segmental abnormality detected. Mild concentric left ventricular hypertrophy.
- Normal right ventricular chamber size and systolic function.
- Mildly dilated left atrium. Normal right atrial size.
- Trileaflet aortic valve. Markedly thickened and calcified leaflets. Markedly restricted valve opening on 2D (eg clips 26, 27). Doppler data as in table above. Moderate systolic pressure gradient. Calculated valve area in the severe range. Findings consistent with paradoxical severe aortic stenosis (low flow, low gradient, normal LVEF). SVI 32 ml/m2, DVI 0.23. Mild aortic regurgitation.
- Mild posterior mitral annular calcification. Structurally normal mitral leaflets. Trivial mitral regurgitation within normal limits.
- Normal tricuspid valve structure. Mild tricuspid regurgitation. Normal PA pressure.
- Mildly dilated aortic root. Normal ascending aortic size.