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## Echocardiographic Final Report

Name: SAMPLE, PATIENT Date: 03/28/2011 17:12 Sonographer: Sample Sonographer RDCS,RVT,RDMS  
DOB: 01/24/1936 Age: 75 BSA: 1.8 BP 150 / 90 Location: SAMPLE LOCATION  
Sex: F Ht: 62.9 Wt: 155 Ordering Physician: MD, Doctor 999-999-9999

**Indications:** TIA, Hypertension Benign, Diastolic Heart Failure, unspecified

### 2D/Doppler Measurements:

RVd	1.0	cm(0.9-2.6)	<b>Est. EF:</b>	70	(>55%)	PVa		(<30)
LVd:	4.9	cm(3.5-5.7)	<b>Simpsons EF:</b>		(>55%)	E Prime Vel	5.2	(>10)
LVs:	2.7	cm(1.5-3.9)	AO	3.2	cm (2.0-3.7)	E/ E Prime	11.4	(<8)
IVS:	0.9	cm(0.6-1.1)	AV Peak Vel:	122.1	cm/s (100-170)	PVR		
LVPW	0.9	cm(0.6-1.1)	MV Peak Vel:	59.2	cm/s(60-130)	LVOT Peak Vel	92.7	cm/s (80-120)
LA s:	4.1	cm(1.9-4.0)	TV Peak Vel:		cm/s(30-70)	LVOT Diameter	2.2	cm(1.8-2.2)
LA V	92		PV Peak Vel:	83.3	cm/s(60-90)	LVOT VTI	26.5	
LA V I	51	< 29 ml/m2	PAP:	46	mmHg	AV VTI		
						AV Area:		cm <sup>2</sup> (4.0-6.0)

### Hemodynamic Analysis

HR: 94 bpm(60-100) Stroke Vol: 101 cc(50-90) Cardiac Out: 9.3 l/min(4-7) CI: 5.3 l/min/m<sup>2</sup>(2.5-4.5)

**Conclusions:** **Follow Up Recommendations:** 1 year, If clinically indicated

**PRINCIPAL FINDINGS:** Features consistent with hypertensive heart disease associated with diastolic dysfunction, preserved LVEF (70%) and findings of myocardial fibrosis.

### FINDINGS:

1. Diastolic Dysfunction: Moderate elevation of resting filling pressure. Severe increase in left atrial volume consistent with a history of elevated LV filling pressures.
2. Mild secondary pulmonary hypertension 46 mmHg; chronic elevation of pulmonary venous pressure significantly increases physiologic risk.
3. Moderate-Severe Resting Hypertension: BP 150/90 mmHg (optimal systolic BP <120 mmHg); Pulse Pressure 60 mmHg (optimal pulse pressure < 55 mmHg).
4. Preserved LVEF 70%; Reduced systolic tissue Doppler (5.0 cm/sec) consistent with mild myocardial fibrosis; Normal left ventricular cavity size; Normal wall thickness. Normal segmental wall motion.
5. Structurally normal valves.

### KNOWLEDGE-BASED INFORMATION:

1. Considerations: Hypertension: Goal: aggressive optimization of systolic BP (<120mmHg) and normalization of resting LV filling pressure. Highest tolerable dose ARB or ACEI; calcium channel blocker; Statin with a goal of LDL cholesterol <70mg/dl; Low dose thiazide-like diuretic.
2. Mild Obesity (BMI: 27.5) is associated with a low risk of Cardiovascular Disease and Type II Diabetes.
3. Suggested Follow-up: Echo/Doppler to assist in management of CV dysfunction in 1 year or sooner is appropriate if there is a documented change in clinical status or symptoms.

### Final 2D Interpretation:

Normal right ventricular size and systolic function. Severe left atrial enlargement. Right atrial enlargement. The aortic valve is not well seen, cusp number is indeterminate and appear thickened, but appears to open well. Thickened normal mitral valve. Structurally normal pulmonary and tricuspid valves. Dilated inferior vena cava (1.9 cm) with normal respiratory collapse. Normal aortic root and ascending aorta dimensions. No intracardiac mass or thrombus. No pericardial effusion.

### Final Doppler Interpretation:

No significant valvular stenosis. No significant valvular regurgitation. Trivial aortic valve regurgitation. Trivial mitral valve regurgitation. Trivial tricuspid valve regurgitation. No evidence for shunt by color Doppler interrogation.

Reading Physician MD FACC  
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