POLYVINYL CHLORIDE STUDY
(Control)

REDACTED

Reason for consultation: Participant as a control in the polyvinyl chloride evaluation project.

, 36 year old white male manager of industrial relations as B.F. Goodrich for 15 years, gives the following history: He complains occasionally of infrequent left precordial sharp chest pain lasting 5-10 minutes but not related to exertion, meals, not awakening him at night and usually come on at rest. They are not disabling and are not associated with any other cardiac symptoms. The patient specifically denies palpitations, edema, shortness of breath, dyspnea on exertion, PND, orthopnea. Pains come on quite infrequently for the last one or two years, such as the patient cannot quantitate their average frequency at this time. Patient specifically denies rheumatic or scarlet fever, rheumatic heart disease, heart enlargement, elevated lipids; no diabetes, no hypertension; the weight is stable. Personal history includes smoking 1½-2 packs/day of cigarettes for 19 years. Alcohol consumption includes 1 beer/week; occasional whiskey average of 2-3/week; medications none; allergies none. Family history reveals a father who has some type of unknown heart disability otherwise unremarkable. Past medical history includes an operation for hemorrhoids in 1972; a fistula-in-ano 1973; tonsils and adenoids as a child; and spasm of the bladder occurring at age 16.

Physical examination: blood pressure was 104/80; pulse 76; respirations 15. Head, eyes, ears, nose and throat were unremarkable including normal funduscopic examination. Neck examination was normal; no venous distension or arterial bruits; chest clear to percussion and auscultation.

Cardiac exam: PMI was at the left midclavicular line, fifth interspace; the first and second heart sounds were normal; there was a palpable, audible fourth heart sound; no third heart sound was noted. No murmur, rubs, clicks were appreciated. Abdominal examination was normal; no organomegaly. Extremities were within normal limits; pulses were 3+.

Cardiovascular data base included the following: The electrocardiogram was within normal limits; chest x-ray, vectorcardiogram and body surface map will be reviewed at a later date.

IMPRESSION AND DISCUSSION:

This 36 year old white male has a history of occasional precordial sharp chest pain for 5-10 minutes for the last 1-2 years. He has an excessive smoking history and physical exam reveals and audible palpable fourth heart sound which was recorded on phonocardiogram.

DIAGNOSIS:
Etiologic: 1) Possible arteriosclerosis.
Anatomic: 1) Possible arterioscloerosis of the coronary arteries.
Physiologic: 1) Sinus mechanism with sinus rhythm.
Cardiac status is unknown at this time and further evaluation is probably indicated.

JLGreen

BFG66477

POLYVINYL CHLORIDE STUDY REDACTED

PATIENT:

Reason for evaluation: Participant in polyvinyl chloride study.

Cardiovascular history: Fifty-five year old white male exposed to polyvinyl chloride.

Present Illness:

Patient denies any history of orthopnea, dyspnea or orthostatic changes. No pedal edema, palpitations or nocturea, but does complain of dyspnea on exertion with two flights of stairs and admits to smoking a pack of cigarettes per day for 40 years. The patient has daily sputum production, gives no symptoms related to chest pain, chest pressure, expanding of chest at the present time.

Personal history includes smoking of cigarettes, 1 pack/day for 40 years, alcohol consumption includes occasional beer and whiskey.

Family history includes no hypertension, diabetes or heart conditions. No lipid abnormalities but a daughter does have high blood pressure.

Review of systems is unremarkable including no operations and no current medications.

Physical examination: Blood pressure supine 120/80; pulse 75 standing was 150/85 rate 86. Head, eyes, ears, nose and throat examination was unremarkable. Neck examination reveales some slight venous distension, 5 cm above the manubrium. Thyroid was not palpable. Chest revealed bilateral diffused rales and ronchi with occasional expiratory wheezes. Cardiac examination: Revealed the PMI to be most notable in the high epigastric area. First and second heart sounds were unremarkable. There was no third heart sound. There was a positive fourth heart sound auscultated. No murmurs, rubs or clicks were appreciated. Abdominal examination revealed no abdominal megaly, no bruits. Extremities examination revealed no cyanosis, but there was clubbing, no edema present. Clubbings was limited to the upper digits. Pulses were bilaterally intact was grossly intact.

The cardiovascular diagnostic procedures performed include the following: The electrocardiogram revealed a terminal conduction delay RSR prominent in lead V1 and V2. The graded exercise test was a normal submaximal test with frequent PVC's post exercise and occasionally two in a row. Holter monitor revealed peaked T waves during the recording, but none significant. Chest x-ray revealed blunting of the costal vertebral angles. There was an increase in the left main pulmonary arteries measured 2.7 cm. There was increased enlargement of the ascending aorta and apparently a calcified left node which appeared to be an assicus node. Phonocardiogram revealed an increase in A2 component at the left sternal border, is also recorded at the left lower sternal border to be increased. Echocardiogram revealed enlargement of the right atrial cavity. Vectorcardiogram was performed and will be added as an addendum later.

REDACTED RL D

ASSESSMENT AND DISCUSSION:

The patient gives a long history for cigarette smoking, sputum production and evidence of possible chronic bronchitis and chronic obstructive lung disease. There are numerous abnormalities in the graphics including evidence for right ventricular cavity enlargement by echo. These abnormalities on x-ray of the chest and including abnormality of the ascending aorta and a bilateral chest abnormalities, the angles, plus enlargement of the left pulmonary artery, to an abnormal dimension. There was electrocardiographic abnormalities indicating possible right ventricular enlargement. The following impressions are made:

Etiologic diagnosis: 1) Pulmonary disease - possible corporalanaly.
2) Exposure to toxic agent, polyvinyl chloride.
3) Possible arterial sclerosis.

Anatomic diagnosis: 1) Arterial sclerosis of the aorta possible.
2) Dilatation of the aorta root by x-ray.
3) Dilatation of the left pulmonary artery.
4) Enlargement of the right ventricular cavity.

1)
Etiologic cardiac diagnosis includes Sinus mechanim, frequent premature ventricular contractions. 2) Intraventricular conduction block.

Cardiac status: Guarded.

Prognosis: Unknown at the present time.

R W Green

BFG66479

HOLTER MONITOR
CARDIOVASCULAR GRAPHICS LABORATORY
UNIVERSITY OF LOUISVILLE

REDACTED

NAME _____ HOSP. NO. _____ DATE 2-4-77

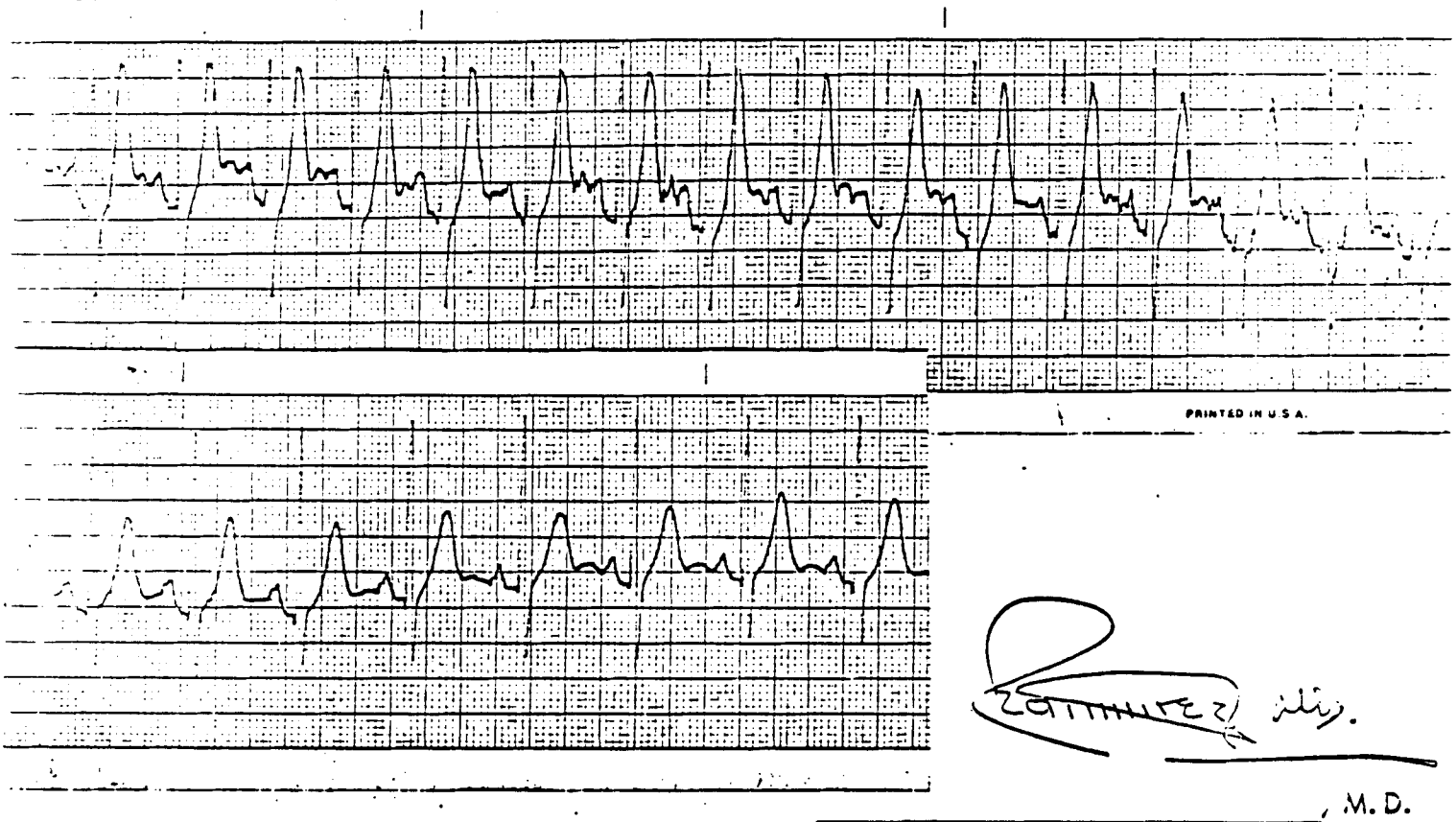
REFERRED BY _____ DIAGNOSIS _____

MEDICATIONS None

INTERPRETATION: Rate Rhythm ST T

COMMENTS:

Marked T wave increase suggestive of subepicardial ischemia of unknown significance.



REDACTED

, M.D.

BFG66480

REDACTED

UNIVERSITY OF LOUISVILLE
Cardiac Function Laboratory
Treadmill Exercise Tolerance Test-Modified Bruce

Number	Name: (last, first, middle initial)	Date of Test
		2 | 4 | 77

Age: 55 Sex: M Ht: 5'6 3/4" Wt: 136¼ AHA Classification

Diagnosis: Routine

Medications: None

Protocol: Three minutes walking at each indicated level with blood pressure, heart rate and ventrilation as recorded.

	Speed mph	Grade %	Heart Pressure	Heart Rate
CONTROL (Supine)			120/80	75
CONTROL (Standing)			150/85	86
I	1.0	5	180/80	94
II	1.7	10	180/80	104
III	2.5	10	210/90	108
IV	3.4	14	220/100	120
V	4.2	16	235/100	150
VI	5.0	18		
VII	5.5	20		
VIII	6.0	22		

Predicted 85%:
Maximal Heart Rate: 171
Submaximal Heart Rate: 145

Blood Pressure and Pulse Recovery (Supine)

Immediately after		2 minutes after		5 minutes after		8 minutes after	
245/90	150	180/80	100	150/80	100	136/80	88

Patient Attained Cutoff Point of: ____ HR 180, ____ HR 200, ____ Syst. BP 240, ____ Diast. BP 140
____ Significant fall in Blood Pressure, ____ subjective distress, ____ other,
at the end of 45" ~~minutes~~ of Stage ____.
Treadmill duration score (TDS) 15 minutes. 45"

REMARKS:

Treadmill discontinued due to marked elevation in systolic pressure and frequent ectopic ventricular contractions.
1. Baseline rSr V1 V2
2. Immediately post exercise: no ST abnormality, frequent PVC, are sequenti
2,5,8 ' No ST - Frequent PVC are sequential (2)

IMPRESSION: Submaximal Test
Abnormal Test becaude of PVC

[redacted] M.D.

BFG66481

(BASELINE ECG)

ECG FORMS - LGH

NAME: ECG NO.: AGE: 55

HOSP. NO.: WARD OR CLINIC: DATE: 2/4/77

Medications:	Digitalis	Yes	No	Procainamide	Yes	No	Quinidine	Yes	No	Beta Blocker	Yes	No
			XX			XX			XX			XX

Description:

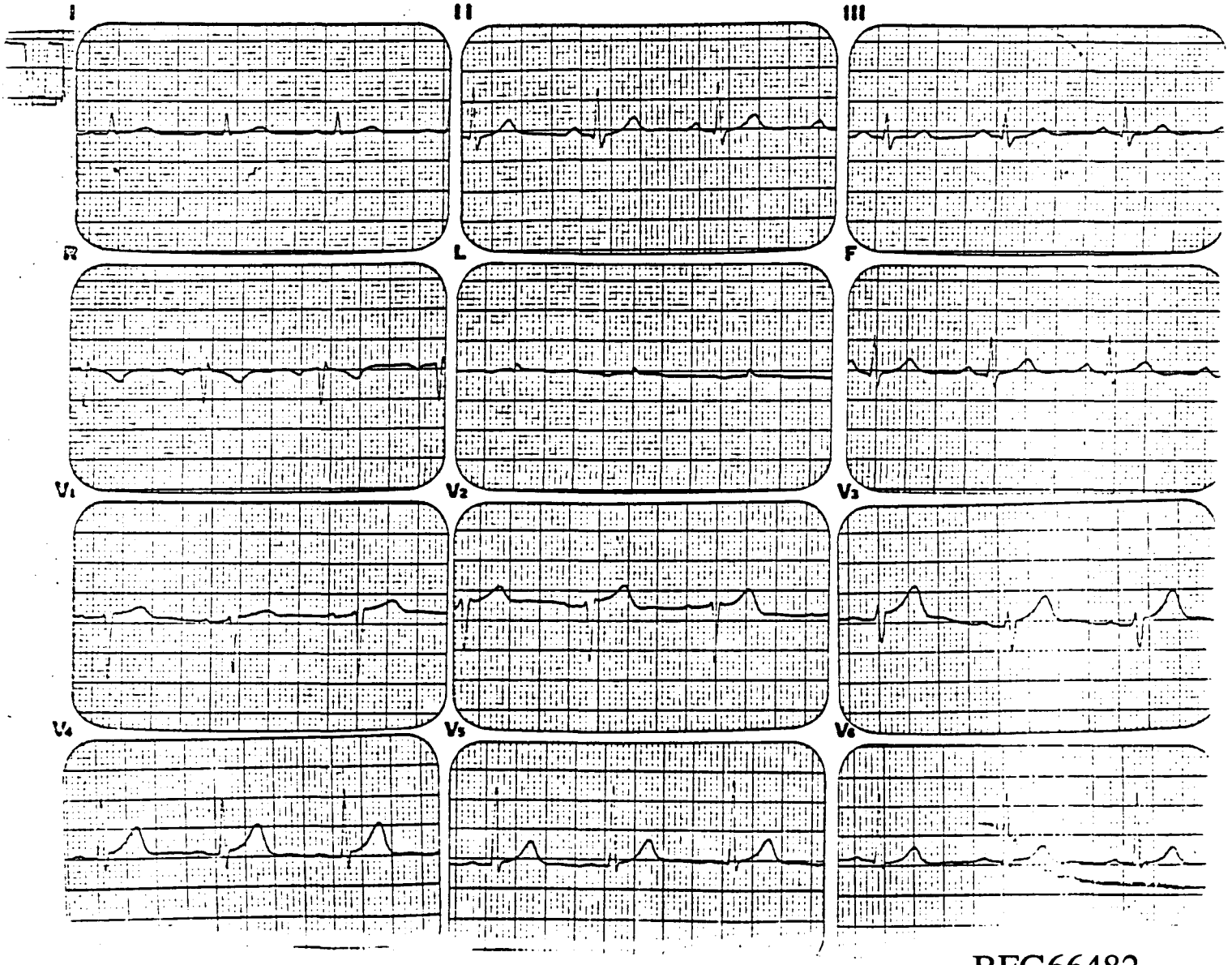
Rhythm	Sinus	PR Interval	.16 sec.	QRS Axis	+60 °
Rate-atrial	75 /min.	QRS Duration	.08 sec.		
Rate-vent.	75 /min.	QT Interval	.38 sec.		

Interpretation:

rSr - V1 V2

REDACTED

Ramirez, M.D.



BFG66482

Section of Cardiology, Department of Medicine
University of Louisville School of Medicine
Louisville General Hospital

REDACTED

ECHOCARDIOGRAPHIC STUDY

Name _____ Age 55 Sex M Room # - Hosp. # -

Diagnosis: _____ Ht. ___ Wt. ___ B.S.A. _____

Referred by Dr. _____ Date 2/4/77

	NORMAL RANGE	TEST RESULTS
RVD	0.7 - 2.4	4.5
RVD INDEX	0.3 - 1.1	-
LVID	3.7 - 5.4	3.8
LVID/M^2	2.27 - 3.03	-
Posterior wall thickness	0.8 - 1.1	1.0
Septal wall thickness	0.7 - 1.2	1.2
LAID	1.9 - 3.8	-
Aortic outflow	2.0 - 3.7	3.0
Aortic valve dimension	1.6 - 2.6	-
Pericardial effusion?		None
Mitral valve velocity D.C.R.	80 mm/sec. - 150 mm/sec.	68
Mitral valve excursion	over 20 mm or 2.0 cm	1.9

COMMENTS:

Increased Right ventricular cavity.

INTERPRETATION:

Green/Ramirez, M.D./vcg

BFG66483

UNIVERSITY OF LOUISVILLE SCHOOL OF MEDICINE

Graphic Laboratory

NAME _____ DATE 2-4-77 HOSP. LOC. _____

AGE: 55 MEDS. _____ CLINICAL DX. _____

HOSP. NO. _____ NYHA CLASS _____ REF. PHYS. _____

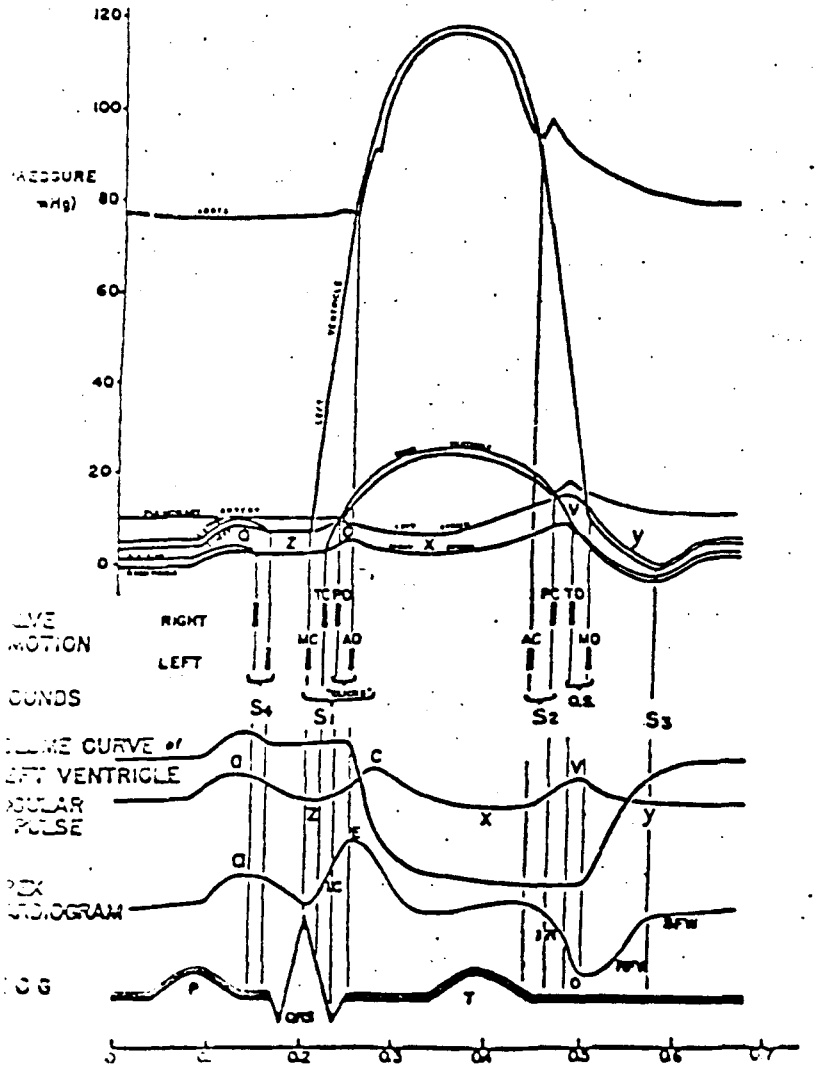
Interpretations: (ACG, PCG, JVP, CPT)

CAROTID PULSE TRACING: Normal
PHONOCARDIOGRAM Normal Increased A2
JUGULAR VENOUS PULSE: Normal.
APEXCARDIOGRAM : Not recorded.

Impression:

Ramirez M.D.

Green/Ramirez, M.D./vcg



Intervals	Normal Range	Patient
Heart Rate	60–100/m.	.82
PR	0.12–0.20 sec.	.15
A_2 P_2	0.01–0.04	.03
A_2 OS	<0.06 (severe) >0.09 (mild)	
Q-1	0.03–0.07	.08
A_2-S_3	0.10–0.20	-
Ejection Time	0.28–0.34	.29
U. Time	0.05–0.11	.15
t Time	0.02–0.04	.04

REDACTED

BFG66484