Patient #103

Chief Complaint: This 74 year old black female was admitted for further evaluation of her congestive heart failure.

History of Present Illness: The patient had begun to note loss of energy and decreased appetite in the summer of last year. By November of that year, she again complained of low energy, noted that she tired easily and noted wheezing when she lay flat. She had evidence of distended neck veins at 90 degrees, bibasilar rales and there was a question of an S_3 gallop. Her chest x-ray showed moderate cardiomegaly with prominence of the upper lobe pulmonary veins. The EKG showed normal sinus rhythm with right axis deviation. There was T-wave flattening and a long QT interval. The echocardiogram showed normal valves, LVH, and normal ventricular contraction. The left and right atria were mildly enlarged. There was mild mitral regurgitation and tricuspid regurgitation and a small pericardial effusion. The findings were consistent with the diagnosis of congestive heart failure. She was started on hydrochlorothiazide.

In early January of this year, she returned to clinic and again complained of weakness and shortness of breath on exertion worsening since her last visit. She could only walk a short distance without experiencing dyspnea. She still had bibasilar rales and was noted to have a laterally displaced PMI. She was started on enalapril along with the hydrochlorothiazide. She did not respond to the enalapril, and in mid-February of 1994 she was admitted for evaluation.

Past Medical History: Twelve years ago, she was found to have pernicious anemia and had been maintained ever since on monthly injections of Vitamin B-12. She had had an echocardiogram at that time, that showed evidence of mitral valve prolapse. There was no past history of hypertension, diabetes, or coronary artery disease. In addition to the medications mentioned above, she took diazepam 5 mg b.i.d.

Family /Social History: There was no family history of hypertension or coronary artery disease. The patient lives with her daughter and granddaughter. She does not use alcohol or tobacco.

Physical Exam: Her temperature was 97^{o} F (36.3^{o} C). The blood pressure was 108/68, pulse 81, and respiratory rate 22. She appeared as a pleasant, black female in no distress. Her pupils were equal, round, and reactive to light and accommodation. There was no papilledema. The extraocular movements were intact. The oral pharynx was normal. She had jugular venous distention up to 12 cm at 90^{o}. There was no adenopathy. She had no thyromegaly. She had a regular rhythm, a normal S1 and S2. There was a II/VI systolic ejection murmur at the left lower sternal border. There was an S3 gallop. She had bibasilar rales with increased breath sounds on the right about half way up. The abdomen was soft and non-tender. There was hepato-jugular reflux, but no hepatosplenomegaly. She had evidence of chronic, non-pitting edema in both lower extremities. The pulses were 2+ and equal bilaterally. She was alert, oriented and had a non-focal neurologic exam.

Laboratory:

			Normal
CBC	Hct	36	*38-47 %*
	Hgb	normal	*12.3-15.7 g/dl.*
	MCV	normal	*81-97 fl*
	RDW	normal	*12-15 %*
	WBC	3.4	*4-12 X $10^{9/L}$*
	Neut	47%	*40-70 %*
	lymph's	41%	*20-50 %*
	mono	6%	*2-10 %*
	platelet count	294	*150-440 X 10^{9}/l*
	reticulocyte ct	2.8	*.5-2.7 %*

			Normal
Chemistries	sodium	139	*135-145 mmol/l*
	potassium	4.3	*3.5-5.0 mmol/l*
	chloride	98	*100-111 mmol/l*

CO2	28	*24-30 mmol/l*
creatinine	1.3	*0.6-1.2 mg/dl*
BUN	19	*8-20 mg/dl*
glucose	98	*65-110 mg/dl*
albumin	3.6	*3.5-5.0 g/dl*
total protein	5.8	*6.8-8.3 g/dl*
bilirubin, total	normal	*0-1.2 mg/dl*
calcium	9.7	*8.5-10.2 mg/dl*
magnesium	1.8	*1.5-2.8 mg/dl*
phosphorous	3.4	*2.4-4.5 mg/dl*
AST (SGOT)	37	*9-26 U/L*
ALT (SGPT)	35	*7-30 U/L*
LDH	199	*108-215 U/L*
ALP	84	*39-117 U/L*
GGT	normal	*5-39 U/L*

PT	normal	*10-13 sec.*
APTT	normal	*21.5-31.9 sec.*
serum iron	38	*35-165 ug/dl*
TIBC	318	*320-550 ug/dl*
saturation	12	*20-45 %*
ferritin	157	*3-151 mg/ml*
TSH	3.0	*0.3-5.0 uIU/ml*

Urinalysis: 3+ protein, 15-25 WBC's per HPF, 3-10 squamous epithelial cells, 3+ bacteria and Trichomonas.

Chest x-ray: cardiomegaly with bilateral pleural effusions. There were increased interstitial markings, most consistent with interstitial edema.

EKG: prolonged PR interval right axis deviation, T-wave flattening and a prolonged QT interval.

Cardiac Cath: mild ventricular systolic dysfunction with a left ventricular ejection fraction of 51%. There was mild global hypokinesis. The diastolic pressures in the left and right chambers

were elevated and nearly equalized. The pressure abnormalities suggested a restrictive myocardial process. There was single vessel coronary artery disease with a 50% stenosis of a large ramus intermedius artery.