

HISTORY

- A woman, 69, with exertional dyspnea, weight loss and peripheral edema.
- Past medical history : Rheumatoid Arthritis, hypothyroidism
- Medications: hydrochloroquine, eltroxin salycilic acid, omeprazole.



HISTORY

- Six month earlier :
 - Syncope during colonoscopy.
 - On electrocardiogram – **Complete A-V block.**
 - Elevated Troponin
 - Coronary angiography – no significant obstruction
 - Pacemaker insertion.
 - Echocardiography – mildly reduced LV contraction.



PHYSICAL EXAMINATION

- Physical examination :Congestive heart failure, NYHA functional class IV.
- Electrocardiogram : pacemaker rhythm.
- ECG 3 years ago :
 - Incomplete RBBB
 - Left anterior hemiblock
 - 1st degree AVB



LABORATORY TESTS

	OCTOBER	APRIL
HGB (GR/ DL)	12	12.6
Creatinine	1.1	1.88
Urea	45	100
ALT	35	279
AST	28	362
GGT	14	54
ALK PHOS.	92	169
Tropinin	0.88	0.73
CPK	150	178
Albumin	3.6	3.5
PT (%)	98%	55



IMAGING

- **Chest radiograph** : cardiomegaly , bilateral small amount of pleural effusion.
- **Echocardiography** :
 - Severely reduced left ventricular contraction (Ejection fraction – 26%)
 - Restrictive filling pattern grade 2
 - Moderate (concentric) biventricular hypertrophy
 - No pericardial effusion



DIFFERENTIAL DIAGNOSIS

- An evaluation for the cause of heart failure was made.
- - Ischemic heart disease.
 - Myocarditis.
 - Amyloidosis
 - Pulmonary Embolism
 - Cardiomyopathy related to RA
 - Malignancy/ paraneoplastic syndrome
 - Vasculitis.
 - Hydroxychloroquine induced cardiomyopathy
 - Pacemaker ?



EVALUATION

- Cardiac scintigraphy with Tc – pyrophosphate : enhanced absorption at the septum .
- Fat biopsy was negative for amyloidosis.
- Total body CT scan was negative for lymphadenopathy or other evidence of malignancy.



EVALUATION

- Immunologic tests such as ANA, ANCA were negative.
- Serology for viruses and blood cultures were all negative.
- Protein and Immuno-electrophoresis were negative.
- At that point plaquenil was stopped.
- MRI (cardiac) and endomyocardial biopsy were planned.



EVALUATION

- During the course of evaluation the patient became hypotensive and did not respond to inotropic therapy.
- She was transmitted to the CCU but refused to any invasive treatment and died on the 13th day of her admission.



PATHOLOGY

- Macroscopically : weight - 500 gr, wall thickness.
- Diffuse atherosclerosis with no significant obstruction and no evidence of myocardial infarction.
- There was no evidence of pulmonary embolism.



PATHOLOGY

- Light microscope : myocyte hypertrophy , sarcoplasmic degeneration.
- No sign of inflammation or vasculitis.
- No evidence of amyloidosis.

- Electron Microscope : myelin – like formations.
- Such bodies were described as ‘pseudomyeloid bodies’ and considered characteristic of chloroquine-induced cardiomyopathy



PATHOLOGY

