AN UNUSUAL CASE OF HEART FAILURE

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THE CASE

A 67 year old woman with a six month history of abdominal pain and weight loss, on a background of paroxysmal AF and ‘colitis’ was admitted with worsening abdominal pain and vomiting.

Examination and initial observations were unremarkable.

Her chest radiograph suggested cardiomegaly and prominent vascular markings. Her abdominal radiograph was unremarkable.

Bloods showed neutrophilia, new-onset mild renal and liver function derangement, and hypercalcaemia.

On day two, she became acutely tachypnoeic and hypoxic; a CTPA ruled out a PE, instead showing extensive acute heart failure.

The patient rapidly deteriorated and arrested going into a ‘Pulseless Electrical Activity’ rhythm. She was resuscitated, intubated and transferred to ICU.

Coronary artery disease was thought to be an unlikely cause of her heart failure due to a incidental recent angiogram and echocardiogram which were normal.

INVESTIGATIONS

An echocardiogram post arrest showed moderate-severe left ventricular failure (ejection fraction 38%) with septo-apical hypokinesis. The myocardium was globally bright with a speckled appearance (Figure 1), suggestive of amyloid deposition.

In view of the hypercalcaemia and impaired renal function the patient was investigated for Myeloma as an underlying cause.

Bence-Jones protein and free light chains were detected on urine electrophoresis and bone marrow biopsy showed a monoclonal gammopathy.

Congo red staining of intestinal biopsies showed extensive amyloid deposition (see Figure 2). This confirmed the diagnosis of heart failure caused by amyloid deposition secondary to underlying Multiple Myeloma.

TREATMENT

She began chemotherapy treatment for Multiple Myeloma, responding well with a reducing paraproteinemia, and careful pharmacological management of her heart failure.

After a prolonged hospital admission the patient was discharged home for continuing treatment as an outpatient.

Since this time the patient has sadly passed away.

REFERENCES

Falk, RH. Diagnosis and Management of the Cardiac Amyloidoses. Circulation. 2005;112:2047-2060


DISCUSSION

Although not a common cause of heart failure, Cardiac Amyloidosis should always remain in the differential of a clinicians mind. Especially in a patient who does not fit the typical pattern for coronary artery disease.