Abstract: \textbf{P1164}

Chloroquin cardiomyopathy manifested as hypertrophic cardiomyopathy

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Background: Chloroquine (CQ) traditionally has been used for the treatment and prophylaxis of malaria. Later, it was introduced for the long-term therapy of rheumatic diseases, particularly in the treatment of systemic lupus erythematosus (SLE). Severe toxicity in the form of irreversible retinopathy is well known under long-term treatment, however, cardiac complications including conduction disturbances [bundle-branch block, atrioventricular (AV) block] and cardiomyopathy - often with hypertrophy, restrictive physiology, and congestive heart failure - is less known.

Aims: In our work we analyzed patients with CQ cardiomyopathy identified in our institution since 2013.

Patients and results: In the observational period 5 patients (all female, average age 57±12 yrs) were diagnosed with CQ cardiomyopathy. CQ therapy was initiated because of SLE, as underlying illness in all patients. CQ treatment duration was 10±6 yrs. Cardiac manifestation occurred in all patients, while skeletal muscle involvement, neurological involvement and GI involvement was observed in 3, 2 and 2 cases, respectively. Initial cardiac symptoms included syncope in 4 cases and sinus arrest in one case. IIIrd degree AV block occurred in 3 cases, while bifascicular block and LBBB was observed in one case each. Pace-maker implantation was necessary in three, ICD implantation in one case. Laboratory findings showed raised CK (363±185 U/l, CK-MB: 26±6 U/l) and LDH (978±120 U/l) levels, indicating skeletal muscle involvement. Cardiac phenotype was compatible with hypertrophic cardiomyopathy in one, and with restrictive cardiomyopathy in two cases, with preserved or slightly decreased LV ejection fraction (50±8%). NTpBNP levels were markedly increased (5858±3580 ng/ml). Cardiac biopsy was performed in all cases which showed histology findings compatible with CQ cardiomyopathy. Genetic screening for Fabry disease was negative in all cases. During the 14±11 month follow up we observed progression into heart failure in three cases, necessitating heart transplantation in one case. One patient died during follow up, due to rejection followed by a successful heart transplantation.

Conclusions: CQ therapy may be associated with severe cardiotoxicity, which is characterized by conduction disturbances and heart muscle disease with restrictive diastolic dysfunction. Patients on CQ therapy should be monitored for cardiac manifestations on a regular basis.