Acute lymphadenopathy complicating quinidine therapy

Chu-Pak Lau, Kee-Lam Wong, Cheuk-Kit Wong and Wing-Hung Leung

Department of Medicine, University of Hong Kong, Queen Mary Hospital, Hong Kong.

Summary: A patient is described with quinidine-induced acute lymphadenopathy syndrome proven by rechallenge of the drug. Serum markers for systemic lupus were negative.

Introduction

Lymphadenopathy is a reported complication of phenytoin therapy.\(^1\)\(^-\)\(^3\) Quinidine bisulphate, a commonly used antiaarrhythmic agent, may also lead to lymphadenopathy through the induction of lupus erythematosus.\(^4\)\(^,\)\(^5\) We describe a patient with quinidine-induced acute lymphadenopathy syndrome proven by rechallenge of the drug and in whom serum markers for systemic lupus were negative. To our knowledge, this is the first confirmed case of direct quinidine-induced lymphadenopathy.

Case report

A 53 year old man gave a history of paroxysmal palpitations on irregular treatment with digoxin which was stopped 1 month ago. When first seen, he was found to be in atrial fibrillation with a controlled ventricular rate of 98/min. He gave no history suggestive of thyrotoxicosis nor ischaemic heart disease, and he was a non-drinker. Examination showed a blood pressure of 120/80 mmHg, and no evidence of valvular disease. An echocardiogram showed normal mitral valve and a left atrial dimension of 3.5 cm in the long axis view. The thyroid function was normal.

He was discharged but 4 days later he developed fever, skin rash and tender lymphadenopathy. The left supraclavicular lymph node was enlarged to 1.5 x 2 cm, and painful 2 x 2 cm large lymph nodes were found in both axillae. Multiple tender inguinal lymph nodes (< 1 cm) were palpable. A maculopapular rash developed over the trunk which spread to the upper limbs. There was no hepatosplenomegaly. Investigations showed normal haemoglobin, white cell count, differentials and platelet count. The renal and liver function tests were normal. Antinuclear factor was negative and complement 3 and 4 levels were within the normal limits. Serology tests for Epstein-Barr virus, rubella virus, cytomegalovirus, adenovirus and toxoplasma were negative. The rash and lymphadenopathy subsided 4 days after discontinuation of quinidine.

In view of the possibility of an intermittent viral infection as the cause of the lymphadenopathy, the patient was admitted for repeat treatment with quinidine. A similar skin rash and fever developed within 12 hours of 500 mg of quinidine, without lymphadenopathy. The medication was stopped immediately and the patient was subsequently controlled on flecainide acetate.

Discussion

Apart from reactions to drugs, lymphadenopathy can complicate infection, serum sickness and connective tissue disease. The hypersensitivit reaction to phenytoin is well known, with lymphadenopathy occurring either at the start of drug treatment or developing after months of therapy. While self limiting, cases of fatal lymphomas have been reported to occur months after cessation of treatment.\(^5\) To our knowledge, there is only one previous published report of an association between lymphadenopathy and quinidine.\(^6\) The patient concerned developed anaemia and lymphadenopathy after 3 years' treatment with quinidine sulphate which subsided on withdrawal of the medication. Rechallenge was not performed in that study although a lymph atypical follicular I causal relationship I denopathy in that symptoms and signs drug-induced state which quinidine is a was not excluded I that study. In our I lupus were negati

References


Correspondence: C.P. Lau, M.D.
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although a lymph node biopsy showed reactive, atypical follicular hyperplasia. However, a direct causal relationship between quinidine and lymphadenopathy in that study was questioned. The symptoms and signs reported were suggestive of drug-induced systemic lupus erythematosus, of which quinidine is a well recognized cause, which was not excluded by relevant serological data in that study. In our patient the serological tests for lupus were negative on both occasions when quinidine was prescribed. Although lymphadenopathy was not detected in the rechallenge after one dose of quinidine, the typical acute febrile illness and skin rash were remarkably similar to the first occasion, and we felt that further treatment with quinidine could not be justified.

Thus an acute lymphadenopathy syndrome can occur after quinidine therapy. The reactions appeared to be self limiting and did not require the induction of lupus erythematosus.

References