Quetiapine and cardiac muscle disorders

Abstract

Several detailed case reports have described cardiac muscle disorders (cardiomyopathy and myocarditis) in patients treated with quetiapine, some of which have been fatal. The symptoms included shortness of breath and oedema. The disorders sometimes resolved on withdrawal of quetiapine.

Quetiapine is chemically similar to clozapine and olanzapine, which are known to sometimes provoke this type of adverse effect.

In practice, a patient who develops dyspnoea or other signs of heart failure during quetiapine therapy may benefit if the drug’s role is recognised and quetiapine withdrawn.

Quetiapine is a neuroleptic that has been available in France since 2011 and has long been available in other countries. It is very similar to other neuroleptics in terms of its efficacy and adverse effect profile (1).

There have been several case reports and drug regulatory agency reviews of cardiac muscle disorders in patients taking quetiapine.

Myocarditis, cardiomyopathy. In 2011, a review by the New Zealand drug regulatory agency described 9 cases of myocarditis or cardiomyopathy in patients taking quetiapine (2). A causal relationship with quetiapine was considered probable in 5 cases. In 2 cases, clozapine was another possible cause.

In January 2013, the publicly accessible part of the British pharmacovigilance database contained 42 reports of cardiomyopathy attributed to quetiapine, including 5 deaths, and 17 reports of myocarditis, including 4 deaths (11).

In practice. These few reports of myocarditis and cardiomyopathy in patients taking quetiapine are a cause for concern, especially since quetiapine is chemically similar to clozapine and olanzapine, both of which are known to sometimes provoke these adverse effects. If a patient taking quetiapine develops dyspnoea or signs of heart failure, the potentially fatal serious nature of these adverse effects justifies withdrawal of the drug and echocardiographic investigation.

Selected references from Prescrire’s literature search.