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Letters to the Editor

Liver toxicity due to olanzapine

Key words: Antipschotic drug. Liver toxicity. Olanzapine.

Dear Editor,

Olanzapine is an atypical second generation antipsychotic drug that is used frequently for the treatment of schizophrenia. Cases of olanzapine-related liver toxicity, as well as clozapine crossed toxicity, have been reported (1,2).

A case of a patient who developed olanzapine-related liver toxicity is presented.

Case report

This is a 47-year-old patient who was admitted on June 2010 for an acute cholestatic hepatitis of a potential alcoholic origin. The patient had a history of paranoid schizophrenia treated with olanzapine 10 mg/day for the last 11 months. Although the clinical picture evolved satisfactory initially, with the gradual normalization of the liver function tests (bilirubin and coagulation tests), cytolysis was increasingly evident. A complete etiological panel (viruses, antibodies, drugs, etc.) was negative. Since there are cases of olanzapine-related liver toxicity reported in the literature, the drug has been discontinued and switched to haloperidol, with a clear improvement of cytolysis until its complete return to normal.

Table I.

	18 Jun	*02 Jul*	*02 Aug*	*29 Sep*
AST (0-37 UI/l)	442	563	120	18
ALT (0-41 UI/l)	173	775	79	9
AP (40-129 UI/l)	178	181	161	80
GGT (8-61 UI/l)	568	650	606	162
TB (0-1.1 mg/dl)	7.52	1.73	0.61	0.44

AST: aspartate aminotransferase. ALT: alanine aminotransferase. AP: alkaline phosphatase. GGT: γ-glutamyl transpeptidase. TB: total bilirubin.

Discussion

There is a well-known causal relationship between atypical antipsychotic drugs and liver toxicity (1,3). Asymptomatic elevation of transaminases is described in the olanzapine label as a common reaction (1-10%), and drug discontinuation is advised in case of hepatitis.

The above mentioned case represents an example of acute hepatitis in a patient with a background liver condition (alcoholic acute hepatitis). When the CIOMS (Council For International Organizations of Medical Sciences) (4) Scale is used, a score of 6 is obtained (probable diagnosis).

The mechanism that leads to olanzapine-related liver toxicity is unknown (5), although it is likely a metabolic idiosyncrasy event. Some authors claim a link with the cytochrome p-450 activity (6).

In conclusion, it is important to monitor liver function in patients with background liver disease who will be administered olanzapine, and this drug should be discontinued if toxicity is detected.

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