Extrapyramidal syndromes associated with SSRI use

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A substantial number of case reports has described extrapyramidal syndromes (EPS) following the use of selective serotonin reuptake inhibitors (SSRIs). In the absence of systematic pharmacoepidemiologic studies, we evaluated whether in a database of spontaneously reported adverse drug reactions in The Netherlands SSRIs were associated with EPS more often than non-antidepressant agents and than other antidepressant drugs.

Data were obtained from The Netherlands Pharmacovigilance Foundation Lareb, which collects and analyses spontaneous reports of adverse drug reactions (ADR) in The Netherlands. Spanning the period January 1st 1985 until July 30th 1999, the Lareb database contained 24,263 ADR reports. To estimate the association between SSRI use and EPS, we calculated ADR reporting odds ratios, compared with both drugs other than antidepressants and with other antidepressant drugs. The reporting odds ratio is defined as the ratio of the exposure odds among reported cases of EPS to the exposure odds of reported other ADRs. Odds ratios were adjusted for age and gender of the patient, year and source of the report, use of antiparkinsonian medication and benzodiazepines and use of other drugs possibly associated with EPS, namely antipsychotic drugs, lithium, metoclopramide and calcium antagonists.

In the Lareb database we identified 148 cases of EPS. In these reports, SSRIs were the drugs most often reported as suspected drug (n = 37), followed by antipsychotic drugs (n = 25) and antidepressant drugs other than SSRIs (n = 13). Use of SSRIs was associated with reporting of EPS, when compared with non-antidepressants (adjusted odds ratio: 6.3; 95% CI 4.2–9.5) and with other antidepressant drugs (adjusted odds ratio: 2.1; 95% CI: 1.2–3.9).

The results of this study suggest that SSRIs have a higher risk of developing extrapyramidal syndromes than other antidepressant drugs. However, the comparison between SSRIs and non-antidepressant drugs may be biased by selective underreporting of EPS associated with antipsychotic drugs.