

## **Selective Serotonin Reuptake Inhibitors and Cough: is there a Gender-Relatedness?**

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### **Introduction:**

The use of selective serotonin reuptake inhibitors (SSRIs) is growing. SSRIs are indicated for depression, obsessive-compulsive disorders, bulimia nervosa, panic disorders, anxiety and post-traumatic stress disorder. They inhibit the presynaptic reuptake of serotonin in the neurons. Possible adverse drug reactions (ADRs) are gastrointestinal complaints, headache, dizziness, dry mouth and sleep disorders.

Cough is not a well known ADR of SSRIs, however a case report has been described in literature[1]. Furthermore, a Swedish study of ADRs on SSRIs revealed ten cases of cough associated with the use of SSRIs. The majority of these cases were women, suggesting a gender-relationship.[2] For a number of drugs it is known that women suffer more frequently of ADRs, for example cough induced by angiotensin-converting enzyme (ACE) inhibitors.[3] Since literature suggests a possible influence of gender on cough associated with the use of SSRIs we were interested if this finding could be confirmed in our dataset.

### **Aim of study:**

To investigate if gender is associated with cough as ADR of SSRIs.

### **Methods:**

Comparison of the reports of cough on SSRIs in the database of the Netherlands Pharmacovigilance Centre Lareb with reports on other drugs.

### **Results:**

Until June 2006 Lareb received 2,743 spontaneous reports of ADRs on SSRIs, of which 26 (0.9%) concerned cough. In 14 cases the patient recovered after dose-reduction or cessation, supporting a causal relationship between cough and the suspect drug. Of the 26 reports 23 (88.5%) were women and only three patients were men, confirming a gender-relationship. In the database 2,398 reports on ACE-inhibitors were filed, of which 329 (13.7%) concern cough. Of these reports 115 patients (35%) were men and 214 (65%) were women.

### **Literature:**

A literature search revealed a case report of coughing associated with the use of paroxetine. [1] A survey of spontaneous reports on SSRIs in reported to the Swedish national Centre of monitoring ADRs revealed 1202 reports of ADRs on SSRIs of which ten (0.8%) concerned coughing. In this survey also the majority of the reports (89%) concerned a female, again suggesting a gender-related ADR.[2]

### **Conclusion:**

Lareb received 26 reports of cough associated with the use of an SSRI, of which 23 patients were women. Although it is known that women use more SSRIs than men, this ratio is much higher than expected on basis of the prescription data. Our findings confirm previous findings of a possible relationship between gender and cough in patients using SSRIs.

### **References**

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