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Poster presentation

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# Selective serotonin reuptake inhibitor use associates with apathy among depressed elderly: a case-control study

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## **Background**

It has been reported for over the past decade that the use of selective serotonin reuptake inhibitors (SSRIs) may associate with the emergence of apathy. The authors hypothesized that depressed patients treated with SSRIs would show more signs of apathy than patients treated with non-SSRI antidepressants. This case control study was conducted to investigate the possibility of the association between SSRI use and the occurrence of apathy.

### Materials and methods

Baycrest Centre for Geriatric Care's Day Hospital Database of elderly depressed patients who received antidepressants was divided into 2 groups depending on antidepressant use at discharge: SSRI user group-SUG, and non-SSRI user group-NSUG. Apathy scales developed by the authors were selected from the Geriatric Depression Scale (GDS) and the Hamilton Rating Scale for Depression (HAMD), and were titled as GDS-apathy subscale (GAS) and HAMD-apathy subscale (HAS). Demographic data, baseline apathy, underlying medical conditions and medication use were studied. Proportion, analysis of variances, Chi-square test, odds ratio with 95% confidence interval were reported.

### Results

Among 384 patients (160 SUG and 224 NSUG), mean GDS and HAM-D at discharge were 12.46 and 10.61 in SUG, and were 11.37 and 9.30 in NSUG, respectively. Using GAS for apathy assessment, 83.7% of patients in SUG and 73.4% in NSUG stayed apathetic at discharge. As evaluated by HAS, 44.2% of patients in SUG and 36.5% in NSUG stayed apathetic. SSRI use was not a predictor of apathy at admission, while it was at discharge, p = 0.029.

The SUG showed more patients with apathy than that found in NSUG (adjusted OR = 1.90 (1.14-3.17). Age 70–75 years tended to be a predictor for the apathy (p = 0.058). Using HAS, age 70–75 years and living situation were associated with apathy at discharge, p = 0.032 and 0.038 respectively.

#### **Discussion**

Even though depression was improved in elderly patients receiving antidepressants, apathy appeared to be greater in patients who had history of SSRI use than that found in patients who did not. Frontal lobe dysfunction due to alteration of serotonin is considered to be one of the possibilities.

#### References

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