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# Metabolic monitoring of psychiatric patients on second-generation antipsychotics

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Background

The current literature suggests that psychiatric patients have increased mortality and morbidity rates compared with the general population, primarily due to cardiovascular disease. There is increasing evidence that the use of second-generation antipsychotics is associated with an elevated risk in the appearance of metabolic abnormalities, which promote the risk of cardiovascular disease. Abdominal obesity seems to play a contributory role in the conferring risk for hyperglycemia and dyslipidaemia.

#### Materials and methods

40 patients, all males, who are now hospitalized in the Psychiatric Hospital of Thessaloniki, were studied. Their mean age is 43 years old (25-78) and they are all on treatment for at least 1 year with second-generation antipsychotics. 33 are heavy smokers and only one exercise twice a week.

### Results

The mean waist circumference is 109.1 cm (ranging from 85 to 131 cm) and for 32 (80%) of them is above 102 cm. The mean BMI is 29.5 and in 36 (90%) cases is above 25 (BMI>25=overweight). 6 (15%) of them have high glucose level(>110mg/dl), 18 (30%) have high total cholesterol (>200mg/dl) and the mean blood pressure is estimated about 130/85 mmHg. 14 patients have triglycerides above normal (>150mg/dl) and 8 have low HDL levels (<40mg/dl). 8 patients need antihypertensive, 4 hypoglycemic and 2 hypolipidemic drugs. In sum, 14

patients (35%) need treatment for the metabolic disturbances, probably caused by the use of the SGAs.

#### **Conclusions**

Literature review and evidence from our study show the important role of weight-gain in psychiatric patients, as it is associated with a variety of adverse physiological effects, including changes in plasma glucose and lipid levels. Therefore, ongoing monitoring for patients who are being treated with SGAs and careful selection of treatment in high-risk patients is needed.

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