The Effects of Antipsychotics on Prolactin and Bone Mineral Density

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Dear Editor,

We have intentionally read the article “The Effects of Prolactin-Raising and Prolactin-Sparing Antipsychotics on Prolactin Levels and Bone Mineral Density in Schizophrenic Patients” by Bulut et al. (1). The authors have investigated the effects of antipsychotics on prolactin levels in patients diagnosed with schizophrenia and the effects of hyperprolactinemia on bone mineral density (BMD) in patients on long-term antipsychotics. They showed that mean prolactin levels were found to be significantly higher in prolactin-raising antipsychotics using group. In addition, they reported that there were no statistically significant differences in BMD values between the two groups for the sites where the measurement was conducted. We thank the authors for their important contribution. This study provides important information to clinicians about the effects of antipsychotics on prolactin levels and BMD in schizophrenic patients. However, we have some minor comments about this article. Firstly, because macroprolactinemia is not any effect in vivo conditions, it should be excluded to diagnose the actual hyperprolactinemia. In the present study, the authors did not mention about the actual or efficient hyperprolactinemia (2,3). Hyperprolactinemia leads to osteoporosis via hypogonadism, as mentioned in the present study. The authors had not evaluated the sex hormone (such as testosterone, estradiol, LH, FSH) levels to reveal hypogonadism, although they had mentioned about them in the limitation of the study. This situation is seen as a significant shortcoming. We suggest that the researchers should consider these factors in similar future studies. However, the bone mineral density was evaluated via the dual energy x-ray absorptiometry (DEXA). In addition to DEXA, if the authors analyzed bone resorption markers in these patients, we believe that this may be useful (4). The main limitation of this study was the relatively small sample size when similar studies were examined (5,6). In addition, if the authors had mentioned the doses of antipsychotics, it would have been better.

In conclusion, although this study gives important information to clinicians about the effects of antipsychotics on prolactin levels and BMD in schizophrenic patients, we strongly believe that the future studies should consider the abovementioned factors.

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