Metformin for the Prevention of Antipsychotic-Induced Weight Gain:

The Optimal Strategy

To the Editor: I read Mulsant and colleagues' letter[1] commenting on Daggolu and Chen's article,[2] which discussed improved adherence to, and potentially effectiveness of, second-generation antipsychotics (SGAs) coprescribed with metformin. They called attention to an important safety consideration: the association between metformin and vitamin B_{12} deficiency based on the evidence that the prevalence of B_{12} deficiency has been reported in 6%–50% of patients with diabetes receiving long-term treatment with metformin.

Indeed, the data concerning the prevalence of B_{12} deficiency in patients coprescribed antipsychotics and metformin have not been well-studied. However, there is an article researching the influence of SGAs on one-carbon metabolism markers, including vitamin B_{12}, in schizophrenia.[3] The authors found that SGA, including olanzapine and risperidone, may decrease vitamin B_{12} level after 12 weeks of SGA treatment of first-episode schizophrenia patients. This information may provide readers with a fuller grasp of the relevant issue.

In conclusion, I agree with Mulsant and colleagues' suggestion that clinicians who decide to coprescribe antipsychotics and metformin need to consider the associated risk of B_{12} deficiency and its neuropsychiatric sequelae. Based on the relevant expert consensus,[4] prophylactic oral supplementation should be considered in clinical practice to mitigate this risk. Furthermore, I encourage clinicians to use a shared decision-making approach based on individual risk factors and preferences, with the help of the latest guidelines,[5] including explaining the benefits and drawbacks of concurrent metformin with patients, when initiating antipsychotics.

References

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Article Information

Published Online: April 6, 2026.
https://doi.org/10.4088/JCP.25lr16260b

J Clin Psychiatry 2026;87(2):25lr16260b

To Cite: Huang CLC. Metformin for the prevention of antipsychotic-induced weight gain: the optimal strategy. *J Clin Psychiatry*. 2026;87(2):25lr16260b.

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Financial Disclosure: None.

Funding/Support: None.

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