

5 Strategies for managing antipsychotic-induced hyperprolactinemia

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Disclosure

The author reports no financial relationships with any company whose products are mentioned in this article, or with manufacturers of competing products.

There is a well-established relationship between antipsychotic treatment and hyperprolactinemia. Most antipsychotics have been linked to increased prolactin levels, and the risk appears to be dose-related.¹ Antipsychotic-induced hyperprolactinemia can be asymptomatic, but it also has been associated with several adverse effects, including menstrual irregularity, osteoporosis, gynecomastia, and sexual dysfunction. Here I discuss what to do before starting a patient on an antipsychotic, and 5 treatment strategies for addressing antipsychotic-induced hyperprolactinemia.

Get a baseline prolactin level

Before starting a patient on an antipsychotic, obtain a baseline prolactin level measurement. If the patient later develops hyperprolactinemia, having a baseline measurement will make it easier to determine if the antipsychotic is a potential cause. Also, it is helpful to gather additional information regarding baseline psychosexual function and menstruation before starting an antipsychotic.

The *Table² (page 53)* shows normal prolactin level ranges for men and women. Antipsychotics tend to raise prolactin levels to a mild or moderate degree, by up to 100 ng/mL (2,000 IU). Generally, the diagnosis of pituitary tumor is more likely when a prolactin level is >118 ng/mL (2,500 mIU/L) in the absence of breastfeeding or pregnancy.³

It is critical to determine if a temporal relationship exists between exposure to an antipsychotic and increase in prolactin levels.³ If the time course is unclear, laboratory tests need to be performed, including

assessing liver, renal, and thyroid function or imaging of the pituitary gland. Also, hyperprolactinemia should not be diagnosed based on a single blood test result, because emotional and physical stress can elevate prolactin levels.

5 strategies for addressing hyperprolactinemia

1. Reduce the antipsychotic dose. Because the risk of hyperprolactinemia is dose-dependent, reducing the antipsychotic dose could be helpful for some patients.

2. Switch to a prolactin-sparing antipsychotic, such as clozapine, quetiapine, olanzapine, or ziprasidone. However, it is often difficult to predict positive outcomes because switching antipsychotics may cause new adverse effects or trigger a psychotic relapse.

3. Consider sex hormone replacement therapy. A combined oral contraceptive could prevent osteoporosis and help estrogen deficiency symptoms in women who require antipsychotic medication. However, this treatment approach may worsen galactorrhea.



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4. Use a dopamine receptor agonist.

Dopamine receptor agonists, such as cabergoline or bromocriptine, have been shown to suppress prolactin secretion. Clinicians should always proceed cautiously because these medications can potentially increase the risk of psychosis.

5. Examine the potential benefits of adding aripiprazole because it can be used for augmentation to reduce prolactin levels in patients receiving other antipsychotics.

In some cases, dopamine receptors can be exposed to competition between a partial agonist (aripiprazole) and an antagonist (the current antipsychotic). This competition may decrease the effectiveness of the current antipsychotic.¹ Also, adding

Table

Normal prolactin level ranges

Men	0 to 424 mIU/L (0 to 20 ng/mL)
Women	0 to 530 mIU/L (0 to 25 ng/mL)

Source: Reference 2

another antipsychotic could increase overall adverse effects.

References

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Aripiprazole can be used for augmentation to reduce prolactin levels in patients receiving other antipsychotics