

Psychiatric Sequelae of Finasteride Use: A Case Study



SCHOOL of MEDICINE

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Abstract

<u>Background</u>: Finasteride has increasingly been prescribed for androgenetic alopecia. In recent years, some men prescribed finasteride have experienced side effects which persisted even after stopping treatment.

<u>Case</u>: A 44-year-old Male presented for voluntary admission to the Acute Psychiatric Unit with suicidal ideation and insomnia. He attributed his symptoms to long-term use of finasteride, which he had stopped taking ten years prior.

<u>**Objective**</u>: Describe known side-effects of finasteride use, detail how one patient experiences/attributes symptoms, and explain the debate surrounding post-finasteride syndrome.

<u>Discussion/Conclusion</u>: Common side effects of finasteride use include decreased libido, gynecomastia, and sexual dysfunction. Some studies have demonstrated a recognizable pattern of symptoms associated with finasteride use; however, many of these studies have been subject to criticism, and the disease status of Post-Finasteride Syndrome remains controversial.

Introduction

5-alpha reductase inhibitors such as finasteride are commonly prescribed to adult men for androgenetic alopecia. Finasteride is generally well tolerated, but can commonly cause several side effects, including loss of libido, sexual dysfunction, and gynecomastia. These symptoms typically resolve with cessation of use. In recent years, however, some men have complained of a constellation of side effects, such as depression and sleep problems, that persist even after stopping treatment. This is commonly referred to as Post-Finasteride Syndrome. There is some debate in the psychiatric community about Post-Finasteride Syndrome as a disease process and literature on the subject is relatively sparse.

Objective

To explain the manifestations of Post Finasteride Syndrome as experienced by one patient and the literature, and to describe the debate around Post Finasteride Syndrome as a disease process.

Case

A 44-year-old male presented for voluntary psychiatric admission following several months of difficulty sleeping and suicidal ideation. He is a former finasteride user, which he stopped taking in 2014 after 11 years of use; since then, he endorsed sexual dysfunction, anxiety, weakness, and "central nervous system problems," which he attributes to finasteride. His psychiatric history is pertinent for obsessive compulsive disorder and major depressive disorder, with no pertinent medical history.

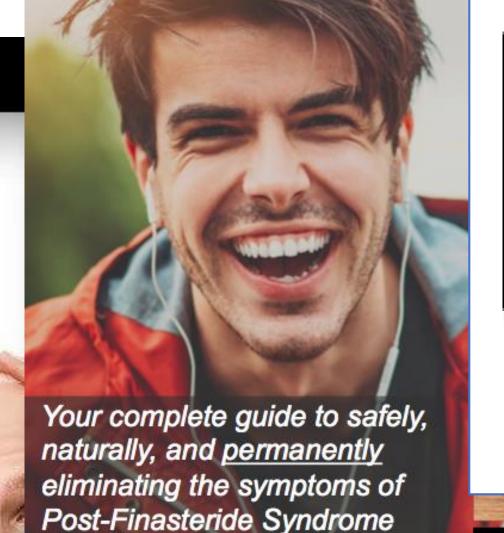
Initial mental status exam revealed a calm, cooperative male appearing stated age without any obvious motor or gait abnormalities. Speech was fast, but not pressured, and mood was anxious. Affect was constricted, but associations were appropriate. Thought process was linear but ruminative. Thought content was notable for suicidal ideation and guilt. He denied hallucinations. Cognition was intact.

Discussion

Several symptoms, including loss of libido, sexual dysfunction, and gynecomastia, are generally accepted to occur with finasteride use, but after stopping the medication, and even while taking the medication in many cases, side effects usually resolve within a few weeks. Recently, 5-alpha reductase inhibitors have also been linked to psychiatric disorders. Some patients complain of "Post Finasteride Syndrome" (PFS), a constellation of neuropsychiatric symptoms that persist even after stopping treatment.¹ Reported symptoms include sexual dysfunction, loss of libido, muscle atrophy, fatigue, and dry skin, as well as psychiatric symptoms including depression, anxiety, suicidal ideation, and cognitive impairment. Some case reports have also mentioned associations with male infertility, floppy iris syndrome, and T-cell mediated skin disease. ¹ A review study revealed that on average patients with exposure to finasteride had a statistically significant increased risk for depression, though no significance was established for disparities in suicidal ideation.² Furthermore, post-finasteride syndrome has been linked to neurohormonal changes, including decreased allopregnanolone levels.³ However, an investigation into studies of PFS concluded that nearly all studies were of low quality or recruited from biased samples.⁴ Some consider PFS the result of mass suggestibility, as frequency of PFS cases parallels media coverage.⁵

PFS Solution





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Summary and Conclusions

- Some men have complained of persistent side effects even after stopping finasteride; symptoms include sexual side effects, muscle atrophy, and depression/anxiety.
- Some studies have reported neurohormonal changes and a persistent constellation of symptoms related to Post-Finasteride Syndrome, suggesting a disorder that requires further attention and investigation
- Others conclude that studies about Post-Finasteride Syndrome are generally of low quality, and that Post-Finasteride syndrome has been reported more commonly with increased media attention

Future Directions

- Larger sample sizes are needed to better define PFS.
- Further investigation into neurohormonal imbalances after use could help dispel some of the controversy surrounding the diagnosis.

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