Suicidal ideation in patients undergoing treatment with 5α-reductase inhibitors

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Background: There have been concerns raised by patients and regulatory agencies after the emerging of reports on men who had used finasteride and developed psychiatric adverse effects such as suicidal ideation. **Objectives:** Our aim was to critically review the literature on the risk of suicidal ideation and suicide during or after use of 5α-reductase inhibitors. **Methods:** In November 2023, we conducted a search of the PubMed database using the search equation ("5-alpha Reductase Inhibitors" [Pharmacological Action]) AND "Suicidal Ideation" [Mesh]. The available scientific publications were analyzed by the authors, collecting pertinent information on the association of testosterone 5- α reductase inhibitors and suicidal ideation. **Results:** In total, 12 publications were obtained and 8 were excluded (three were commentary articles, two had no full-text available, one was a letter to the editor, one was a meta-analysis, and one was a pharmacovigilance note). One additional publication was included after analyzing the references of the studies obtained. The analysis of the 5 original articles included revealed that there is no apparent difference in the presence of suicidal ideation when comparing different 5α-reductase inhibitors (finasteride and dutasteride) [1–5]. However, there seem to be contradictory results when comparing different doses of finasteride [2,4] and patients age or therapeutic indications (alopecia and benign prostatic hyperplasia) [4]. One of the studies also revealed that there is a greater risk of suicidal outcomes only in patients with a history of mood disorders, reinforcing the importance of psychiatric history as a confounding factor in the analysis of studies [3]. **Conclusion:** In sum, more studies are needed to understand suicidal ideation in patients undergoing treatment with 5α-reductase inhibitors, clarifying potential confounding covariates, to improve evidence-based clinical practice.

Keywords: Adverse Effects; Benign Prostate Hyperplasia; Dutasteride; Finasteride; Pharmacovigilance.

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