

# Persistence of Sexual Dysfunction in Young Men Receiving Finasteride for Androgenic Alopecia: A Large Single Center Observational Cohort Study



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## Introduction:

- Recent reports<sup>4-6</sup> describe some men treated with oral finasteride (F) 1 mg/day for androgenic alopecia (AGA) experiencing impotence and loss of libido persisting after discontinuation of F.
- The manufacturer's Full Prescribing Information for F describes erectile dysfunction and libido disorders continuing after treatment discontinuation, but indicates that from spontaneous reports alone, it is impossible to reliably estimate frequency of persistent sexual dysfunction or establish a causal relationship to drug exposure.
- We queried an archive for an electronic medical record (EMR) database at a large, urban academic medical center to identify healthy men who developed sexual dysfunction (SD) after taking F.

## Methods:

We searched our EMR database (2.9 million individual records) for the interval January 2001 to September 2013, identifying:

- Healthy men\* < 42 years old
- Exposure to F  $\leq$  1.25 mg/day
- No exposure to 5-alpha reductase inhibitors other than F  $\leq$  1.25 mg/day.
- No SD prior to F exposure
- No history of prostate cancer or prostate surgery
- No prior phosphodiesterase-5 inhibitor (PDE-5I) use
- N = 4,274

\*No history of alcoholism, diabetes, obesity, hypertension, vascular disease, prostate disease, prostate surgery, prostate cancer, exposure to anti-androgen drugs, or exposure to diuretics

- We identified impotence and low libido using ICD-9 codes\*\* with confirmation by manual review of the EMR.
- We used a threshold of  $\leq$  1.25 mg for F dose, as tablet-splitting of the 5-mg dose was common.
- We identified PDE-5I use based on prescription records in the EMR.
- We defined new SD as new impotence, low libido, or PDE-5I use.
- We defined persistent SD as impotence or low libido lasting > 90 days after discontinuation of F.

\*\*607.84, v41.7, 302.7, 302.70, 302.71, 302.72, 302.79, 302.89, 302.9, and 799.81

## Results:

Our cohort consisted of 4,274 healthy young men who were prescribed F  $\leq$  1.25 mg/day. The results are described in the following table:

Outcome	N	% (of SD cohort)	% (of whole cohort)
Impotence	147	54.4%	3.4%
Low Libido	69	25.6%	1.6%
New PDE-5i	210	77.8%	4.9%
Persistent SD	47	17.4%	1.1%
Total SD	270	100.0%	6.3%
No SD	4004		93.7%
Total	4274		100.0%

In the 47 patients experiencing persistent SD:

- Median age at first exposure to F was 31.0 years
- Median duration of SD following termination of F was 1,398 days (IQR 396-2,424 days)
- Persistence > 365 days occurred in 36 of the 270 individuals (13.3%)
- The maximum persistence observed was 3,356 days.

## Conclusions:

This report is the first to quantify the rate of persistent SD in healthy, young men exposed to finasteride  $\leq$  1.25 mg/day. Our findings indicate a need for increased awareness among patients and practitioners of the risk of persistent sexual dysfunction associated with use of finasteride for androgenic alopecia.

## References

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