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Note To Chart:

Given the reality that many young men have experienced marked, and at times drastic, disruption of their lives as they have discontinued taking finasteride, after being on it for days, weeks, months or years, and descended into an abyss called post-finasteride syndrome (PFS), it comes as a welcome surprise to have recently learned of a theory, put forth by my patient, Mark Horowitz, who is a research scientist in the field of neuroendocrinology, that goes a good distance in explaining a biological mechanism that may underlie this experience.

Until now, I held the believe that whether a guy stopped finasteride abruptly or if he tapered off the 1 mg tablets slowly over weeks, it would not effect his risk of "crashing" shortly after stopping the drug and developing PFS. This belief was formed after caring for several hundred guys in this situation since late 2009. Then Mark confronted this situation and decided to stop finasteride after a many year use due to side effects he had lived with too long, including fatigue, decreased concentration and memory, mild physical weakness and mild hypogonadism. After 1-2 weeks off the finasteride, during which nothing unusual occurred, he awoke one day 100 % clear-headed and feeling vital and normo-sexual. This lasted another day of long hours of work. After educating himself on the experiences of many other guys who discontinued finasteride and "crashed" after a brief period of feeling extra good, he went back on finsateride at 1/10th the previous dose, 0.1 mg/d. Initially, there was no change from this. Then about 24 hours later his above symptoms returned and stayed for 4-5 days. He changed his finasteride dose to 0.08 mg/d and gradually felt better after 3-4 days until he felt good again. Gradually he lowered his dose to 0.04mg/d and over the past week he has felt great and not noticed any resurgence of his previous bad symptoms.

His theory, put forth to explain his experience, is as follows: There is data showing that A. very low doses of finasteride, as low as 0.05mg/d, inhibit dihydotestosterone (DHT) levels in serum, and target tissues like scalp skin, nearly as much as 1mg/d, and B. a single dose of finasteride, even as low as 0.04mg, will inhibit DHT for longer than 7 days. Given this reality, after being on finasteride at 1 mg/d for an extended period of time, cells in the tissues that house 5-alpha reductase, including the hypothalamus, will have markedly up-regulated their androgen receptors, in search of DHT molecular stimulation. In nearly all usual circumstances of stopping finasteride, there will be a period of time before which the DHT levels can begin to return as new 5-alpha reductase is created. But, once this occurs there appears to be a surge of activity

creating DHT, which appears to be experienced by guys having recently discontinued finasteride as a "honeymoon period" with great sexuality and clarity of mind. This relatively large change in DHT serum or tissue levels may be too much too fast for the up-regulated androgen receptors in the HPG axis, likely in hypothalamic cells, and thus cause an excitotoxic injury of some sort and degree to these cells.

One clinical observation that is consonant with this theory is my finding that every guy I have seen with PFS, who have had their serum reproductive hormone levels measured, has shown a pattern of biochemical hypogonadism that localized above the testicle and above the pituitary gland, at the hypothalamic level and/or the forebrain. It is as if the axis above the pituitary gland stops accurately modulating pituitary gonadotropins in response to serum levels of bioavailable testosterone, due perhaps to dysfunction of the hypothalamic neurosecretory cells due to the above theorized excitotoxic injury from overexposure to DHT after a long period of absence of DHT at these cells.

Sincerely,

Alan Jacobs, MD Diplomate, American Board of Psychiatry and Neurology