Sexual and Nonsexual Problems after Finasteride used for Hair Loss in Young Men

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Tirana – ALBANIA
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**Background:** Finasteride (FIN) was approved for treatment of BPH in 1992 and for male pattern hair loss (MPHL) in 1997. 5a-Reductase irreversibly reduces the double bond at the 5 position in specific androgens, progestins, and glucocorticoids via a nicotinamide adenine dinucleotide phosphate mechanism. The first aim of our study was to review sexual & nonsexual persistent adverse effects (PAEs), in young male who took FIN for treatment of MPHL. The second aim was to see the affection of hormones and neurosteroids by FIN.

**Material and methods:** Male pts treated with FIN to cure Androgenetic Alopecia (AGA) and experiencing PAEs development (PAEs-D) after FIN discontinuation. Three different structure questionnaires well self-administered by pts, to evaluate the development and severity of PAEs-D. Arizona Sexual Experience Scale (ASEX) to assess Sexual Function (SF) before and after FIN assumption. Aging Male Symptoms Scale (AMS). Eligibility criteria were sexual dysfunction (SD) for at least 3 months after FIN discontinuation. The changes in sexual frequency and SD score between pre-and post-FIN used were compared. Subjects with PAEs were reassessed 9-14 months (mean 12) after discontinuation of FIN. Exclusion criteria before FIN were SD, psychiatric problems and other medical comorbidities.

**Result:** 35 pts were enrolled in this RCTs, age 25-50 yrs, medium age 30 yrs. The mean length of FIN use was 24 months. ASEX evaluated before and after FIN assumption had a mean increasing of 14.75 (p = 0.05).

68% of pts reported that their symptoms worsened after the discontinuation of the drug; during assumption (13%), during and after (85%), after (6%).

The five ASEX domains before and after FIN as compared: at reassessment were: "before FIN" and "after FIN" were statistically significant. P = 0.0001 and P = 0.01, respectively.

**Course of symptoms:** worse 63%, equal 22%, improved 15%.

AMS completion revealed that pts perceive their symptoms as severe - 59%, moderate - 33%, mild 5%, absent 3%.

Our data do not reveal statistically significant differences in relation with duration of therapy or to the age of assumption. Two pts with PAEs-D had lower plasma and cerebrospinal fluid levels of several neurosteroids. Nonsexual PAEs-D are linked to the neurosteroid allopregnanolone.

**Conclusions:** PAEs-D of FIN in young men include EF, low libido, lack of orgasm and depression. The FIN use in young males is a potential risk for their sexual health. Physicians treating MPHL should discuss with pts for the potential risk of PAEs-D with FIN. ED may be related to low levels of DHT and lower levels of several neurosteroids by FIN use.

We propose the Dermatologist Society to take off from their guidelines: "The utilisation of FIN for MPHL."
**Background:** Finasteride (FIN) was approved for treatment of BPH in 1992 and for male pattern hair loss (MPHL) in 1997. 5-α Reductase irreversibly reduces the double bond at the 4,5 position in specific androgens, progestins, and glucocorticoids via a nicotinamide adenine dinucleotide phosphate mechanism. The first aim of our study was to review sexual & nonsexual persistent adverse effects (PAEs), in young male who took FIN for treatment of MPHL. The second aim was to see the affection of hormones and neurosteroids by FIN.
**Material and methods:** Male pts treated with FIN to cure Androgenic Alopecia (AGA) and experiencing PAEs development (PAEsD) after FIN discontinuation. Three different structure questionnaires were self-administered by pts, to evaluate the development and severity of PAEsD. Arizona Sexual Experience Scale (ASEX) to assess Sexual Function (SF) before and after FIN assumption, Aging Male Symptoms Scale (AMS). Eligibility criteria were sexual dysfunction (SD) for at least 3 months after FIN discontinuation. The changes in sexual frequency and SD score between pre-and post- FIN used were compared. Subjects with PAEs were reassessed 9-14 months (mean 12) after discontinuation of FIN. Exclusion criteria before FIN were SD, psychiatric problems and other medical comorbidities.
**Result:** 35pts were enrolled in this RCTs, age 25-50 yrs, medium age 30 yrs. The mean length of FIN use was 24 months. ASEX evaluated before and after FIN assumption had a mean increasing of 14.75(p<0.05). 68% of pts reported that their symptoms worsened after the discontinuation of the drug: during assumption(13%), during and after(85%), after (6%). The five ASEX domains before and after FIN as compared at reassessment were: “before FIN” and “after FIN” were statistically significant, P<0.0001 and P<0.01, respectively. Course of symptoms: worse 63%, equal 22%, improved 15%. AMS completion revealed that pts perceive their symptoms as: severe -59%, moderate-33%, mild 5%, absent 3%. Our data do not reveal statistically significant differences in relation with duration of therapy or to the age of assumption. Two pts with PAEsD had lower plasma and cerebrospinal fluid levels of several neurosteroids. Nonsexual PAEsD are linked to the neurosteroids allopregnanolone.

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We propose the Dermatologist Society to take off from their guidelines:

“The utilisation of FIN for MPHL”. Thank you