

PSA CONCENTRATION CHANGE IN MEN TAKING LOW DOSE FINASTERIDE AND DUTASTERIDE FOR MALE ANDROGENETIC ALOPECIA

Hypothesis / aims of study

The effects of low dose 5ARI (5 α -reductase inhibitor) on PSA (prostate specific antigen) levels for treat male-pattern hair loss are less well understood. The aim of the present study was to assess the change in PSA concentration in men taking low dose finasteride and dutasteride for male androgenetic alopecia

Study design, materials and methods

Serial PSA values was obtained in each patients from a systematically retrieved database of 1,379 male patients taking finasteride 1.25 mg daily and dutasteride 0.5mg every 3day for androgenetic alopecia between 2002 and 2012. The PSA kinetics was stratified for age, initial PSA, type of medication and duration of exposure to medication.

Results

Overall PSA levels declined by 27.8% from baseline values after taking low dose 5ARI for male androgenetic alopecia. 1094 (79.3%) of patients showed a PSA reduction of 40.8%, but 285 (20.7%) of patients showed a PSA increase of 24.2%. Low dose dutasteride and finasteride have a similar effect on PSA reduction. When administered relatively short-term of 3-6 month, PSA concentration was reduced by 26.0% and remained similarly even for long-term intake. There was no significant PSA reduction for those with baseline PSA level under 0.5ng/ml. In multivariate logistic analysis, baseline PSA level under 0.5ng/ml was independent factor for stable or increasing PSA.

Interpretation of results

Both dutasteride and finasteride showed similar PSA reduction of approximately 25% after a short period of administration. PSA levels can be remained stable or increased for those with a baseline PSA level under 0.5ng/ml.

Concluding message

When interpreting serial PSA values, clinicians should be taken into account of the potential effect of low dose 5ARI therapy for male androgenetic alopecia.

The PSA kinetics according to age, initial PSA, type and duration of medication

Parameters	No of patients	PSA			
		Baseline	FU PSA	Change %	P value
Age (yr)					
< 50	887 (64.3)	0.87 \pm 0.42	0.61 \pm 0.37	-26.3 %	< 0.001
\geq 50	492 (35.7)	0.93 \pm 0.48	0.63 \pm 0.40	-30.6 %	< 0.001
Initial PSA (ng/ml)					
< 0.5	235 (17.0)	0.38 \pm 0.09	0.36 \pm 0.20	-1.8 %	0.171
\geq 0.5	1144 (83.0)	1.00 \pm 0.41	0.67 \pm 0.38	-33.2 %	< 0.001
Type of medication					
Dutasteride	627 (45.5)	0.90 \pm 0.45	0.59 \pm 0.36	-31.1 %	< 0.001
Finasteride	752 (54.5)	0.89 \pm 0.44	0.64 \pm 0.39	-25.1 %	< 0.001
Duration of medication (Months)					
3-6	8 (0.6)	1.07 \pm 0.38	0.81 \pm 0.44	-26.0 %	< 0.001
6-12	203 (14.7)	0.96 \pm 0.47	0.62 \pm 0.36	-34.3 %	< 0.001
12-24	409 (29.7)	0.85 \pm 0.41	0.57 \pm 0.35	-28.0 %	< 0.001
24-36	320 (23.2)	0.92 \pm 0.46	0.64 \pm 0.41	-27.8 %	< 0.001
\geq 36	439 (31.8)	0.88 \pm 0.44	0.63 \pm 0.38	-24.8 %	< 0.001

Disclosures

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