## The Effectiveness of the Extract of Serenoa Repens (Saw Palmetto) In Idiopathic Facial Hirsutism

## **Dear Editor**

Hirsutism is defined as the presence of excessive coarse hairs in a post-pubertal male pattern on a female's face and body. Unwanted and excessive hair, especially facial hair, is the cause of great psychological cosmetic and social concern for hirsute women <sup>1-5</sup>.

Many women employ mechanical methods to divest themselves of their unwanted hair. These mechanical methods comprise shaving, plucking, bleaching, waxing, depilatory creams, electrolysis and laser treatments <sup>1</sup>. However, there are some disadvantages with these mechanical methods consisting of their temporary efficacy necessitating repeated use; moreover, some of these methods are time consuming or costly <sup>1</sup>.

Serenoa repens (saw palmetto) has been used to treat benign prostatic hyperplasia and dysmenorrhea <sup>2</sup>. However, to our knowledge, its safety and efficacy in treating hirsutism has not been investigated sufficiently. Studies show that it inhibits 5-alpha reductase and as a result prevents the conversion of testosterone to dihydrotestosterone <sup>3-4</sup>.

We evaluated 31 women (aged 20 to 45 years with a mean of  $28.4 \pm 6.5$ ) suffering from idiopathic facial hirsutism (limited to the chin area).

These patients did not harbor any history of other ailments and had not received any chemical, laser or electrolysis treatment for their hirsutism.

Exclusion criteria consisted of pregnancy, lactating and utilization of other medications or methods of treatment and occurrence of any side-effects during our treatment period.

Patients used a cream containing the extract of saw palmetto (Nela Depil®) twice a day for two months. Prior to treatment, hair numbers in the patients' chin area (adjacent to the midline at the right) were counted employing a ring with a 2 cm² area. They were also asked about their satisfaction level and the number of hair removal methods (threading, waxing or shaving) required.

The average pre-treatment and 1 and 2 months post-treatment hair count was 16  $\pm$  7.1, 13.7  $\pm$  5.7 and 11.6  $\pm$  5.1, respectively, revealing a 16%

decrease after one month and a 29% decline after 2 months of treatment. Both these declines in hair count were statistically significant (P<0.0001). Moreover, compared to the end of the first month of treatment, a 15% decrease was observed after the second month of treatment which was statistically significant (P<0.0001). However, only one patient had to be excluded due to contact dermatitis following treatment.

Number of the required hair removal methods did not increase in any of our patients during or after the treatment. In fact, 23 patients experienced a decrease in the frequency of hair removal methods (76.66%), this quantity did not change in 5 patients (16.66%) while the remaining 2 (6.66%) had a decrease in the number of hair removal methods in the second month of treatment, but not in the first. However, the difference in the number of required hair removal methods was not statistically significant after the first and the second month of treatment (P=0.5).

At the end of the treatment, 16 patients were satisfied, 8 patients reported their dissatisfaction and the remaining 6, even though unsatisfied after the first month, declared their satisfaction after the second month of the treatment. The difference in patient satisfaction level was statistically significant between the first and the second month of our study. (P=0.01)

In our study, we evaluated the efficacy of serenoa repens extract as a natural topical 5 alpha reductase inhibitor in treating idiopathic hirsutism. Although we did not follow up our patients for a lengthened period of time— solely two months-, decreased amount of terminal hair and overall patient satisfaction were noted post-treatment. Unfortunately, we could not evaluate hair thickness in this study. On the other hand, the number of required hair removal methods did not change. Moreover, except for a case of contact dermatitis, no other complications were observed as a result of utilizing the cream containing this herbal extract.

To our knowledge, no other studies have previously investigated the effectiveness of the extract of serenoa repens in treating idiopathic hirsutism. However, we believe further trials on larger sample sizes and for a longer period of time are required to determine both the reduction rate of hair count after longer duration of the drug usage and also the rate of recurrence after discontinuation of the drug.

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