

## Management of Post-Partum Telogen Effluvium (PPTE) With Laser

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Introduction:

Postpartum Telogen Effluvium (PPTE) is a diffuse hair pattern loss which occurs within 3 months after delivery.

It is well studied that hormone levels during and after pregnancy are dramatically distinct. During pregnancy, there is a peak of human chorionic gonadotropin at 2 months, a 9-fold gradual increase in progesterone and an 8-fold increase in estrogens. Once the placenta is removed at birth, the levels of progesterone and estrogens return to normal within 2-4 days. Prolactin also rises gradually during pregnancy, reaching a 20-fold increase at term. It is believed that PPTE can be explained with these variations in hormone levels in postpartum women.

There are times when hair regrowth after childbirth does not occur as quickly as desired, but currently there are few little hair loss treatment options available for lactating mothers. The Fotona Erbium: YAG SMOOTH Mode laser is a new modality in regenerative medicine which has shown potential for hair regrowth and follicle stimulation in a minimally invasive way, suitable for PPTE, without concern for chemical excretion into breast milk during the lactation period.

| Laser      | Fotona SP Dynamis      |
|------------|------------------------|
| Wavelength | 2940nm                 |
| Handpiece  | PS03                   |
| Fluence    | 7.75 J/cm <sup>2</sup> |
| Mode       | SMOOTH                 |
| Frequency  | 3.3Hz                  |
| Passes     | 3-4                    |
| Spot size  | 7 mm                   |



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## CLINICAL CASE:

A 36-year old female, who has delivered a baby 9 months earlier, came to the clinic with the concern of hair thinning over the temporal area and increased hair shedding started at 3 months after delivery. She was actively breastfeeding her baby and is aiming to continue for a year. Hair specific blood test (Complete Blood Count, Thyroid Function Test, Iron Study, Vitamin D) were carried out and were unremarkable.

In view of her lactating status, injectable treatment and topical medication was not being considered. Fotona Erbium: YAG SMOOTH Mode laser was proposed, in addition to continued use of her prenatal vitamins and nutraceutical hair tonic.

Fotona SP Spectro Erbium:YAG laser was used, with the following specifications: wavelength 2940nm, handpiece PS03, spot size 7mm, fluence 7.75 J/cm<sup>2</sup>, SMOOTH Mode, frequency 3.3Hz, 3-4 passes.

Six sessions with the parameters shown above were performed. The first 4 sessions were performed with a 2-week interval, while the last 2 sessions were performed with a 4-week interval.

The photos were taken before the procedure and 3 weeks after the 6th session.





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