LOW LEVEL LASER THERAPY AND HAIR REGROWTH

Amany Nassar(1) - Amin Amer(1)

Zagazig University, Dermatology, Zagazig, Egypt(1)

Background: low-level laser therapy was evaluated for stimulating hair growth. Hair loss exists in different types, but the most common types are androgenetic alopecia and telogen effluvium. There are many treatments with highest levels of medical evidence, but patients who exhibit intolerance or poor response to these treatments are in need of additional treatment modalities.

Objective: The aim was to evaluate the efficacy and safety of low-level laser therapy for female pattern hair loss (FPHL) and telogen effluvium (TE).

Patients and Methods: A prospective interventional study included 20 female patients, 13 were diagnosed as female pattern hair loss and 7 were diagnosed telogen effluvium, Patients received 2 sessions per week of the iGrowR Hair Growth System; each treatment session of 20 minutes for 16 successive weeks (with a total of 32 treatments) with follow-up. Patients evaluated by software-analyzed trichoscopic images, as the primary endpoint was the percent increase in hair counts from baseline to post-treatment. Global photography and patient satisfaction was determined as a secondary end point.

Results: twenty patients completed the study (13 FPHL, 7 TE). In FPHL patients baseline hair counts were 222.3 ± 33.5 (N = 13), in TE patients baseline hair counts were 271.2 ± 39.0 (N = 7). Post-treatment hair counts were 255.3 ± 30.4 (N = 13) in FPHL patients (P = 0.007), and 294.2 ± 38.1 (N= 7) in TE patients (P = 0.143).

Conclusions: LLLT significantly improved hair counts in FPHL, and there is no significance difference in TE patients. No serious adverse events were reported. Additional studies should be considered to determine the long-term effects of low-level laser treatment on hair growth and maintenance, and to optimize laser modality.