SKIN WHITENING MULTIPLE EMULSIONS LOADED WITH GREEN TEA AND LOTUS EXTRACTS: AN EFFICACY STUDY

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OBJECTIVES: Currently, there is no study reporting synergistic skin whitening potential of green tea and lotus in healthy humans. The aim of this study was to investigate the in-vitro anti tyrosinase activity of green tea and lotus extracts, consequently to determine the actual potential efficacy of the topical formulations in healthy humans in a 60 days treatment course. METHODS: Thirty three healthy human subjects were enrolled in an approved single-blind, placebo-controlled, split-face trial. Each group with eleven subjects applied green tea (GT), lotus (L), or green tea plus lotus (GT-L) multiple emulsions over 60 days treatment period. The subjects applied placebo treatment on one side of the face while active treatment on the other side of the face and they were educated to apply the formulations once daily at bed time. Clinical objective evaluations were performed with a non-invasive biometry probe at baseline, day 15, 30, 45 and day 60. RESULTS: Melanin index: MJ measured for each treatment on different time intervals and it was statistically significantly different comparing the treatments. MJ of the GT single treatments (P < 0.001). CONCLUSIONS: It was concluded that green tea plus lotus could be explored further for the treatment of pigmentation disorders.

OUTCOME OF HARKÁNY THERMAL WATER COMPLETED PUFA THERAPY VERSUS TRADITIONAL PUFA THERAPY IN PATIENTS WITH PSORIASIS

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OBJECTIVES: City of Harkány has a traditional and well recognized thermal water spa since early 19thcentury, the oldest one in Hungary. The aim of our study was to compare the effect of traditional PUFA therapy to the effect of PUFA therapy complemented with Harkány water therapy on psoriasis patients. METHODS: Patients with psoriasis were, in total, 110 subjects, with and without a history of psoriasis, were recruited with the help of dermatologists (from January to December 2014). We identified two patient groups. The traditional PUFA treatment was conducted in the Hospital of Komló (N=25 patients, average age: 54.7 years), the PUFA treatment complemented with Harkány thermal water treatment was conducted in the Spa Hospital in Harkány (N=52 patients, average age: 57 years). The length of the treatment was 3 weeks. The efficacy of the treatment was assessed by Psoriasis Area Severity Index (PASI) scores. RESULTS: Patients treated with traditional PUFA therapy had a statistically significantly better outcome (P<0.01), while patients treated with PUFA complemented with Harkány water therapy had the starting PASI score of 8.2. After the three weeks long treatment patients treated with traditional PUFA treatment got a 50% better PASI score vs. the starting point. In the other group, where patients were treated with PUFA complemented with Harkány water the PASI score showed an improvement bigger than 75%. The change is 5.2 points at the traditional and 6.2 points at the Harkány water therapy, and the derogation is significant (p<0.005), than in the control group. CONCLUSIONS: The PUFA therapy complemented with Harkány thermal water therapy resulted in an increased improvement in the patients’ quality of life, based on the PASI scores. It is advisable to rethink the psoriasis therapy protocol, due to the increased improvement of the patients treated with Harkány thermal water.

EFFICACY COMPARISON OF ANTI-VEGF AND LASER PHOTOCOAGULATION IN THE TREATMENT OF VISUAL IMPAIRMENT DUE TO DIABETIC MACULAR EDEMA: A SYSTEMATIC REVIEW AND NETWORK META-ANALYSIS

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OBJECTIVES: Compare the efficacy of therapies in the treatment of visual impairment due to diabetic macular edema. METHODS: A systematic review was conducted to identify relevant randomized control trials (RCTs). RCTs reporting 6- or 12-month results for ranibizumab, aflibercept, laser, or sham were included. The analysed outcomes were best-corrected visual acuity (BCVA) measured as the proportion of patients gaining at least 10 letters or 15 letters. Efficacy comparisons were made using a Bayesian network meta-analysis with random treatment effects adjusting for baseline BCVA. RESULTS: The analysis included 2634 patients from 10 RCTs (including DRRC-net Protocol T). For the percentage of patients who gained ≥10 letters, ranibizumab 0.5 mg pro re nata (PRN) was numerically superior to aflibercept (OR, 1.6; 95% credible interval [Crl], 0.6–5.4). The odds of gaining ≥15 letters were the same for ranibizumab 0.5 mg PRN and aflibercept 2×8 (OR, 1.0; 95% Crl, 0.3–5.9) for PRN). Similar findings were found for ranibizumab 0.5 mg treat ment and extent (P&E). The probability that ranibizumab 0.5 PRN was a better treatment than aflibercept was 88% for patients gaining ≥10 letters and 51% for patients gaining ≥15 letters. The odds-ratio of gaining ≥10 letters with ranibizumab 0.5 mg (PRN) vs aflibercept was 3.5 (95% CrI: 1.4-7.07) for ≥15 letters. The probability that ranibizumab 0.5 mg was superior to 0.3 mg PRN was 89% for patients gaining ≥10 letters and 82% for patients gaining ≥15 letters. CONCLUSIONS: Ranibizumab 0.5 mg patients had a higher probability of gaining ≥10 letters than aflibercept patients and had similar probabilities of gaining ≥15 letters as aflibercept. Ranibizumab 0.5 mg has a higher probability of being the best treatment than ranibizumab 0.3 mg PRN.