PS5: SKIN WHITENING MULTIPLE EMULSIONS LOADED WITH GREEN TEA AND LOTUS EXTRACTS: AN EFFICACY STUDY

Mahmood T, Akhtar N

University of Central Punjab, Lahore, Pakistan, 1The Islamia University of Bahawalpur, Bahawalpur, Pakistan

OBJECTIVES: Currently, there is no study reporting synergic skin whitening potential of green tea and lotus in healthy humans. The aim of this study was to investigate the in-vitro and in-vivo 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 other side of the face. They were excluded 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: MI measured for each treatment on different time intervals and it was statistically compared with controls. Efficacy and side effects were offered to the single treatments (P < 0.001). CONCLUSIONS: It was concluded that green tea plus lotus could be explored further for the treatment of pigmentation disorders.

PS5: OUTCOME OF HARKANY THERMAL WATER COMPLETED PUVA THERAPY VERSUS TRADITIONAL PUVA THERAPY OF PSORIATIC PATIENTS

Fjer R1, Lazač A1, Jegede A1, Sebestyén A1, Cs Horváth Z2, Endrei D1, Tánodosi P1, Móricz B1, Boncz P2

1Zsigmond Vilmos Spa Hotel, Harkány, Hungary, 2National Healthcare Service Center, Pécs, Hungary, 3National Health Insurance Fund Administration, Pécs, Hungary, 4Government Office of Baranya County, Pécs, Hungary, 5University of Pécs, Pécs, Hungary, 6Komló City Hotel, Komló, Hungary

OBJECTIVES: City of Harkány has a traditional and well recognized thermal water spa since early 19thcentury, the only one in Hungary. The aim of our study was to compare the effect of traditional PUVA therapy to the effect of PUVA therapy complemented with Harkány water therapy on psoriasis patients. METHODS: Patients with psoriasis were randomly divided to receive PUVA with or without the help of half a bottle of Harkány water. We identified two patient groups. The traditional PUVA treatment was conducted in the Hospital of Komló (N=25 patients, average age: 54.7 years), the PUVA treatment complemented with Harkány thermal water treatment was conducted in the Spa Hotel 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) score. RESULTS: Patients treated with traditional PUVA therapy had a statistically significant result at the end of the treatment (p < 0.001), while patients treated with PUVA complemented with Harkány water therapy had the starting PASI score of 8.2. After the three weeks long treatment patients treated with traditional PUVA treatment got a 50% better PASI score vs. the starting point. In the other group, where patients were treated with PUVA 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 treatment, and the derogation is significant (p<0.005), than in the control group. CONCLUSIONS: The PUVA 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.

PS5: 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

Reguer SA1, Malcolm WA1

1Nouvel Pharma, Basel, Switzerland, 2Novartis UK, Frimley, UK

OBJECTIVES: To 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 DRCR-net Protocol T). For the percentage of patients who gained ≥10 letters, ranibizumab 0.5 mg pre re nata(PRN) was numerically superior to aflibercept (OR: 1.6; 95% credible interval [CrI]: 0.6–5.4). The odds of gaining ≥15 letters were the same for ranibizumab 0.5 mg PRN and aflibercept 2q8 (OR: 1.0; 95% CrI: 0.3–5.9 for PRN). Similar findings were found for ranibizumab 0.5 mg treat and extend (T&E). 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. The odds-ratio of gaining ≥10 letters with ranibizumab 0.5 mg (PRN) vs. laser photocoagulation was 1.76 (95% CrI: 1.16–2.66), and 2.02 (95% CrI: 1.40–3.07) 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. The odds-ratio of gaining ≥10 letters with ranibizumab 0.5 mg patients had a higher probability 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.

PS5: SYSTEMATIC REVIEW AND MIXED TREATMENT COMPARISON OF THERAPIES FOR DIABETIC MACULAR EDEMA

Fortier K1, Kiss N2

1Biogen AB, Upplands Väsby, Sweden, 2Pfizer AB, Solvotuna, Sweden

OBJECTIVES: 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 other side of the face. They were excluded 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: MI measured for each treatment on different time intervals and it was statistically compared with controls. Efficacy and side effects were offered to the single treatments (P < 0.001). CONCLUSIONS: It was concluded that green tea plus lotus could be explored further for the treatment of pigmentation disorders.