

Skin-whitening and anti-wrinkle effects of topical vitamin PP - instrumental and subjective analysis on healthy volunteers

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INTRODUCTION AND OBJECTIVE

Skin hyperpigmentation can be caused by sun exposure, hormonal changes, aging process, inflammation, skin injuries or accumulation of haemosiderin. It is also one of the most common complication after sclerotherapy of blood vessels. The hyperpigmentation is the source of patients' discontent, especially women, hence it is essential to seek methods for its elimination. The purpose of this study was to evaluate skin-whitening and anti-wrinkle effects of topical vitamin PP (4% and 5%).

METHODS

The study was conducted on 50 volunteers with different etiology of hyperpigmentation. They were divided into two groups: 26 women tested night cream no 1474 and 24 women tested day cream no 1473. Cream no 1474 contained 5% vit. PP, product no 1473 contained 4% vit. PP. Products were used once daily for a period of 6 weeks. Skin condition was analyzed every 3 weeks (VISIA Complexion analysis for the measurement of UV-spots and hyperpigmentation as well as Mexameter for melanin content). Anti-wrinkle efficacy was measured by Visioscan and Primos. Self-evaluation were done after 3 and 6 weeks of product usage.

RESULTS

Gradual decrease of melanin content was observed after both products application. Better results was observed after night cream usage: 16% and 25% reduction of melanin content after 3 and 6 weeks of test versus 13% and 20% after day cream usage. Hyperpigmentation measured by VISIA showed similar whitening effect after both tested products application. However decrease of UV-spots was slightly better after day cream usage. Products had comparable anti-wrinkle properties: naso-labial furrows was reduced up to 163 μm and crow feet's decreased up to 53 μm . 92% patients observed skin brightening after 3 weeks of night cream application and 83% of volunteers noticed the same effect after

6 weeks of day cream application. Anti-wrinkle efficacy was observed by more patients using night cream.

CONCLUSION

Anti-wrinkle efficacy was similar after topical application of 4% and 5% vitamin PP concentration. However skin whitening effect was better after 5% vitamin usage. Vitamin PP in such concentration can be used for reduction of hyperpigmentation not only in ageing facial skin, but also in patients with melasma, lentigo, freckles, post-inflammatory spots or mechanical, thermal and chemical discolorations.