



QUALITY OF LIFE, QUALITY OF CARE, AND PATIENT SAFETY

THE TIME-DEPENDENT VARIATIONS OF LIP SKIN PROPERTIES COMPARED TO FACE AND BODY SKIN IN HEALTHY WOMEN

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Although there have been a lot of studies that investigate the circadian rhythms of face skin, few studies focused on the changes of lip skin. The aim of the present study was to verify differences of lip skin properties according to time, especially during the sleep.

This clinical study was performed on 43 Korean women (25-55 years old). We recruited volunteers in three age groups. We measured volunteers' skin of lip, cheek, and forearm. Subjects were sampled every 4h in two sessions over a 24h span. Our results showed that the transepidermal water loss of lip skin decreased during the sleep, compared with morning and day time. Their reduction rate was higher than that of the other body sites. The hydration of lip skin also decreased during the sleep, the value was lower in the evening and night than in morning. The skin surface pH was higher in the day time, it showed decreased tendency during the sleep in both lip and face. Redness of lip skin was decreased during the sleep, other body sites showed no differences according to time. The blood flow of lip skin increased in day time, and decreased during the sleep. These changes were not showed in the cheek. We also investigated the volume of lip, which was increased in day time and continually in the night time.

Consequently, we came up with the data on circadian rhythms of lip skin compared to face and body skin. Our study reveals that the lip skin changed remarkably in TEWL, which were relevant in the great decrease of hydration. These results suggest some topical application of humectant on the lip skin before the sleep.

