lag between herpes zoster and chickenpox. The results of this study suggest the possibility of the occurrence of chickenpox associated herpes zoster.

Key Words: Herpes zoster, Chickenpox, Epidemiology, Time series analysis

P149
Clinicohistopathologic association of skin microrelief pattern and dermal ridge evaluated by 3D reconstruction
Department of Dermatology, College of Medicine, Korea University
Ga Na Oh, Jung Hee Yun, Hee Sang Kye, Dai Hyun Kim, Jong Yeob Kim, Jae Bun Choi, Soo Hong Seo, Young Chul Kye, Hyo Hyun Ahn

Most studies about structures of the human skin have been on the general histologic structures of the skin. The purpose of this study was to understand the correlation of microlief (MR) pattern of the human skin and dermal structure by comparing the two-dimensional (2D) surface-viewed image of skin obtained from dry dermoscopy and three-dimensional (3D) reconstructed image of a histopathology sections of the human skin specimen. Specimens were obtained from the medial forearm, abdomen, and volar aspects of the finger tips of cadavers. Investigation of the skin surface pattern was performed with dry dermoscopy. Histologic structures of the skin were evaluated by 3D image that was reconstructed from the alignment process of multiple images of vertical sections taken from the histopathology slides. MR was deeper and wider in the abdomen than in the medial side of forearm. In the medial side of forearm, 10.27 rete ridges were distributed in the plateau in average. In the abdomen, about 14.37 rete ridges were distributed in the plateau. Considering with the help of 3D technique, MR pattern is a super ordinate concept to rete ridges. In this study, we could understand the relationship between histopathologic pattern of dermal ridge and MR pattern of skin surface. The 3D reconstruction technique may allow a better understanding of the pathogenetic changes of skin surface including aging skin.

Key Words: Dermal ridge, Skin microrelief pattern, 3D reconstruction

P150
Skin barrier functions in the patients of chronic renal failure with hemodialysis
Department of Dermatology, Yonsei University Wonju College of Medicine
Dong Hye Kim, Minyoung Jung, Eung Ho Choi

Many patients with chronic renal failure (CRF) complain pruritus and xerosis, which were suspicious about skin barrier impairment. Therefore, we performed this study to elucidate the characteristics of skin barrier function in the patients of chronic renal failure with hemodialysis (HD). Total 60 persons including 25 patients of CRF with HD over 6 months between age 40 and 60, and 35 healthy persons as normal control, were enrolled. Basal transepidermal water loss (TEWL) and stratum corneum (SC) hydration were measured on the skin of forehead, inner forearm and calf of all participants, and the barrier recovery rate after acute barrier disruption was calculated from the changes of TEWL on the skin of inner forearm. In CRF patients, basal TEWL was decreased at inner forearm and calf, and SC hydration was increased at forehead compared to normal control. There were no differences of basal TEWL, SC hydration and skin surface pH between pre- and post-HD. Barrier recovery rate was remarkably decreased in CRF patients. From our results, we could interpret that skin barrier function of CRF patients is impaired, similar with aged skin. However, no decrease of SC hydration in both inner forearm and calf was observed, discrepant with previous studies.

Key Words: Skin barrier, Chronic renal failure, Transepidermal water loss, Stratum corneum hydration, Barrier recovery rate

P151
Skin barrier functions in the patients with atopic dermatitis, allergic contact dermatitis, psoriasis and xerotic eczema
Department of Dermatology, Yonsei University Wonju College of Medicine
Dong Hye Kim, Noo Ri Lee, Sang-Yeon Park, Na Young Yoon, Eung Ho Choi

Lesional skin of most inflammatory skin diseases, especially atopic dermatitis, presents an impaired barrier function. If non-lesional skins also have the impaired barrier, proper