



INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

RECOLONIZATION OF STAPHYLOCOCCUS HOMINIS AND STAPHYLOCOCCUS SAPROPHYTICUS ON DRY SKIN AFTER 6 HOURS APPLICATION OF CERAMIDE-CONTAINING MOISTURIZER

Rizki Hapsari Nugraha⁽¹⁾ - Suci Prawitasari⁽¹⁾ - Siwipeni Irmawani Rahayu⁽²⁾

Department Of Dermatology And Venereology, Faculty Of Medicine, Universitas Brawijaya/dr.saiful Anwar Regional General Hospital, Malang, Indonesia⁽¹⁾ - Department Of Clinical Microbiology, Faculty Of Medicine, Universitas Brawijaya/dr.saiful Anwar Regional General Hospital, Malang, Indonesia⁽²⁾

Background: Healthy skin has good hydration and barrier function. The use of moisturizer is essential to improve the skin barrier and increase the number of skin microbiome. Skin microbiome may have a strong influence on the functional differences between healthy skin and diseased or damaged skin, also protect skin from pathogenic bacteria. Humans are colonized by many different staphylococcal species such as *Staphylococcus hominis* and *Staphylococcus saprophyticus* are found on virtually all body parts.

Observation: A 37-years-old woman complained of dry and rough skin in both arms since 1 year before the visit to outpatient clinic dr.Saiful Anwar Regional General Hospital. Patient also complained about relapsing of whitish patchy, dry and thickened skin on left hand since 4 years ago. Patients had history of atopic dermatitis, nummular dermatitis and lichen simplex chronicus. Based on the assessment of Overall Dry Skin (ODS) score, patient had dry skin grade 2. The number of skin microbiome was assessed before and after 6 hours of ceramide-containing moisturizer application. The identification of bacteria using VITEK2®, showed *Staphylococcus hominis* and *Staphylococcus saprophyticus* colonization. The number of bacteria increased from 52.103 to 58.103 cfu after 6 hours application of ceramide-containing moisturizer.

Key message: The application of moisturizer is essential to improve skin barrier and increase skin microbiome such as *Staphylococcus hominis* and *Staphylococcus saprophyticus* recolonization. In this patient, we found that ceramide-containing moisturizer application could make rapid recolonization in 6 hours.

