

***Syzygium aromaticum* Merrill et Perry Inhibits The Development of Atopic dermatitis-like skin lesions in Isolated NC/Nga mice**

The Clinical Trial Center for Bio-industry, Semyung University, Jecheon, 309-711, Korea

Jong Phil Bak*, Jeonghyun Son, Yong-Min Kim, Ee-Hwa Kim

Objective

Syzygium aromaticum Merrill et Perry (SA) has been used medicinal herb in oriental medicine to treat for many diseases. Present study was investigated that SAE has therapeutic effect on atopic dermatitis (AD) disease.

Materials and Methods

Materials

Dried cloves were extracted by MeOH. 0.2%, 1% and 5% MeOH extract of SA (SAE) was diluted by distilled water. 1% pimecrolimus ointment (Elidel; Norvatis) was used in the treatment of AD, and it tooks for the AD-like lesion to heal.

Methods

We used AD-model mice by treat DNCB (2,4-dinitro-chlorobezene) to dorsal skin. We examined that SAE was applied to AD-like lesions for 10 weeks and evaluated macroscopically, histologically and immunologically.

Results

SAE treated lesions were recovered with concentration-dependent manner macroscopically atopic signs and symptoms (dermal edema, erythema, dryness, itch and others) and histologically (improvement of infiltration of inflammatory cells). In AD skin, it was reported that levels of IgE and histamine was up-regulated in their serum and levels of inflammatory cytokines from Th1/Th2 lymphocytes were increased in lesion such as IL-2, IL-4, IL-10, IFN- γ , and others. In DNCB-treated mice, levels of that also were up-regulated whereas in MeOH extract from SAE applied mice were down-regulated as well as level of 1% pimecrolimus ointment applied mice. Taken together our data indicated that application of MeOH extract from SAE to lesions directly appears to be useful in the treatment of AD.

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Corresponding author: Jong-Phil Bak E-mail: jpbak77@gmail.com Tel: +82-43-653-6305

