Ah Reum Lee et al., Med Aromat Plants 2017, 6:6 (Suppl)
DOI: 10.4172/2167-0412-C1-015

Heated *Scutellariae Radix* inhibits wrinkle formation through decreased advanced glycation end product (AGEs)

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Scutellariae Radix (SR) is been known to possess the bioactive compounds such as baicalein, wogonin. Various processing methods, such as heating and steaming have been widely applied to enhance the therapeutic and biological effects of plant materials including SR in East-Asia area. The aim of this study was to explore the inhibit effect of wrinkle formation of Heated *Scutellariae Radix* (HSR) via Advanced Glycation Endproducts (AGEs) path way. *Scutellariae Radix* is prepared by heating with 30% ethanol. AGEs formation inhibitory activities of SR and HSR measured using bovine serum albumin, glucose and fructose. To evaluate the produce inhibition effect of SR and HSR AGEs, SD-rats were distributed into four groups: Normal rats (Nor), AGEs-induced rats (Con), AGEs-induced rats treated with 100 mg/kg SR (SR) or HSR (HSR). To induce AGEs, streptozotocin (50 mg/kg) was administered intra-peritoneally and after 3 days oral administrated 100 mM methyl glyoxal for 3 weeks. The oral administration of HSR suppressed the AGEs in serum and skin tissues. Furthermore, the expressions of inflammatory cytokine were significantly decreased in HSR treated group compared with the SR group in skin tissues. AGE-induced rats exhibited that the significant decreased collagen, however, HSR treatment (100 mg/kg of body weight) up regulated collagen compared with AGE-induced rats. In addition, the expression levels of skin fibril-related genes such as MMP-1 were improved by HSR treatment. In conclusion, these results suggest that heated *Scutellariae Radix* extract has the potential as a cosmetic material which possess anti-wrinkle formation activities.

Biography

Ah Reum Lee is a student at Daegu Haany University, Republic of Korea

Seong-Soo Roh has lectured and studied Pharmacology and Toxicity in Korean Medicine at Daegu Haany University. In addition to natural drug research, he is also focusing on research on functional food ingredients and natural cosmetic materials. Presently he is the Editor-in-Chief of The Korea Association of Herbology and serves as an Academic Member and Editor of internationally renowned journals.

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