

## Effects of Cervi cornus Colla (deer antler glue) on reconstructing skin equivalents

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The aim of this study was to investigate the effects of Cervi cornus Colla (CCC) on skin equivalent (SE) formation. H&E staining showed that SEs containing hyaluronic acid (HA) or HA & CCC had a thicker epidermis than the control. Immunohistochemical staining showed that p63 was mainly present at the basal layer of epidermis in the HA & CCC model. Involucrin was obviously expressed in the upper layer of the epidermis in the HA & CCC model. Moreover, we observed that integrins  $\alpha 6$  and  $\beta 1$  were strongly expressed in the basement membrane zone of the HA & CCC model. In the HA & CCC model, the dermis expressing type 1 collagen was more compact. In conclusion, our data indicate that CCC contributed the formation of epidermis, basement membrane, and extracellular matrix in reconstructing SEs, and suggest that CCC may be a useful adjuvant for producing SEs.

### Biography

Hyo-Soon Jeong received her PhD from the Keimyung University School of Medicine (Korea) in 2003. She is working as a postdoctoral fellow in the Department of Biochemistry at the Chung-Ang University College of Medicine. For a period of two years her work involves bioartificial skin and signaling pathways of hyperpigmentation in melanocytes.

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