Lycii Radicis Cortex improved steroid side effect: Bone loss as steroid side effect in atopic dermatitis animals

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Steroid is a strong immune regulator which is used in inflammation diseases widely. However, although its effectiveness, steroid usage is strictly controlled because of its severe side effects such as osteoporosis, diabetes, immune system broken and cushing's syndrome. The cause of secondary osteoporosis is known that occurs in certain diseases or treatments condition. The steroid has been pointed out as crucial cause of secondary osteoporosis. There are many efforts to replace steroid, but usage of steroid is still increasing. Lycii Radicis Cortex (LRC) is has been used to treat high blood pressure, decrease body temperature and pain killing traditionally. In our previous study, LRC had reduced bone-loss in ovariectomized rat. According to reports, LRC had effect of anti-high glucose and anti-inflammation also. However, the effect of LRC in steroid-induced osteoporosis has not been investigated. Therefore, we establish the research methodology for evaluation of medicine in bone loss by steroid side effect in atopic dermatitis condition. In this result, LRC has effects especially trabecular number and bone volume on steroid-induced secondary osteoporosis model. Furthermore, LRC inhibited Dickkopf-1 (DKK-1) and sclerostin (SOST) in animal serum. For that reason, LRC might have inhibitory effect on secondary osteoporosis through its Wnt-pathway blocking.

Biography

Bina Lee has completed her master degree from Kyung Hee University. She is pursuing Doctoral Degree at Kyung Hee University of Korean Medicine. She published more than 4 papers related to inflammation and immunity in the SCIE journals and more than 3 papers related to bone in the global journals including SCIE journals. She is participating in several national research projects to skin, bone and inflammation.

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