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Prunus davidiana Franchet promotes osteoblast activation and has a positive effect on the healing of fracture-induced SD-rat

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Fracture is one of the common orthopedic diseases. Recently, Korean medicine has shown a good effect in the treatment of fracture and the number of patients who choose Korean medicine for fracture treatment is increasing. Fracture healing is closely related to the number and activity of bone marrow mesenchymal stem cells near the fracture site. Therefore, studies on medicine that activate osteoblasts are important in the treatment of fractures. The medicine used to treat fractures is Selective Estrogen Receptor Modulators (SERMs), Parathyroid Hormone (PTH1-34), bisphosphonates and calcitonin. However, long-term administration has various side effects. Therefore, it is necessary to study natural products which have low toxicity and positive effect for long-term administration. *Prunus davidiana* Franchet (PF) is the dried semen of *Prunus persica* (L.) Batsch. PF has been used as an anti-oxidant, anti-thrombotic lipids, anti-influenza virus and increase blood circulation. Blood circulation affects the fracture treatment, so it is expected that PF will be effective in treating fractures. In this study, we aimed to determine the effects of ethanol extracts of PF on fracture healing of rats and investigate its mechanism of actions related to the RUNX2 and MAPK signaling pathway.

Biography

Jae Hyun Kim has completed his Master Degree from Kyung Hee University and he is pursuing his Doctoral Degree at Kyung Hee University of Korean Medicine. He has been working as a Researcher for various basic research projects and has published more than 3 papers related to bone in the journal. In addition, he has been a "Brain Korea 21" scholarship student since 2014 and constantly researched the effects of herbal medicines and ingredients on various diseases (skin disease, allergy, etc.).

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