

# 学位論文審査結果の要旨

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<p>(学位論文審査結果の要旨)</p> <p>Inflammatory Skin-Derived Cytokines Accelerate Osteoporosis in Mice with Persistent Skin Inflammation</p> <p>【主論文審査結果の要旨】</p> <p>著者らは論文において下記の内容を述べている。</p> <p>Secondary osteoporosis can also be caused by chronic inflammatory skin disease as well as rheumatoid arthritis or inflammatory bowel disease. However, the exact role of osteoporosis in inflammatory skin conditions has not been elucidated. Using a mouse model of dermatitis, we investigated the pathophysiology of osteoporosis in inflammatory skin conditions and the therapeutic impact of osteoporosis medication on inflammatory skin disease. We employed model mice of spontaneous skin inflammation, specifically overexpressing human caspase-1 in the epidermis. Bone density and the expression of various mRNAs in the femur were examined by micro CT and RT-PCR. The effects of minodronate and anti-RANKL antibody on bone structure, histology, and femur blood flow were studied. The mouse model of skin inflammation showed a marked decrease in bone density compared to wild-type littermates with abnormalities in both bone resorption and formation. Minodronate improved bone density by decreasing osteoclasts, but anti-RANKL antibody did not improve. In the dermatitis model, the blood flow in the bone marrow was decreased, and minodronate restored this parameter. A model of persistent dermatitis exhibited marked osteoporosis, but the impact of chronic dermatitis on osteoporosis has not been thoroughly investigated. We should explore the pathogenesis of osteoporosis in skin inflammatory diseases.</p>			

以上、本論文は、皮膚炎モデルマウスにおいて皮膚炎によって骨密度の低下が生じ、従来の骨粗鬆症治療薬であるビスホスホネートが非常に有効であることを報告した論文であり、学術上極めて有益であり、学位論文として価値あるものと認めた。

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