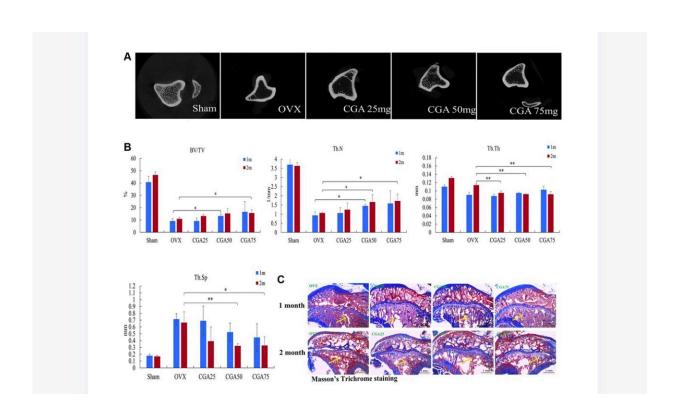


Team finds that chlorogenic acid prevents ovariectomized-induced bone loss

March 26 2024



Chlorogenic acid prevents OVX-induced bone loss. Credit: *Aging* (2024). DOI: 10.18632/aging.205635

A new research paper titled "Chlorogenic acid prevents ovariectomized-



induced bone loss by facilitating osteoblast functions and suppressing osteoclast formation" has been <u>published</u> in *Aging*.

Osteoporosis is a common bone disease in aging populations, principally in postmenopausal women. Anti-resorptive and anabolic drugs have been applied to prevent and cure osteoporosis and are associated with different adverse effects. Du-Zhong is usually applied in Traditional Chinese Medicine to strengthen bone, regulate bone metabolism, and treat osteoporosis. Chlorogenic acid is a major polyphenol in Du-Zhong.

In this new study, researchers Chien-Yi Ho, Chih-Hsin Tang, Trung-Loc Ho, Wen-Ling Wang, and Chun-Hsu Yao from China Medical University, China Medical University Hospital and Asia University found chlorogenic acid to enhance osteoblast proliferation and differentiation. Chlorogenic acid also inhibited RANKL-induced osteoclastogenesis. Notably, ovariectomy significantly decreased bone volume and mechanical properties in the ovariectomized (OVX) rats. Administration of chlorogenic acid antagonized OVX-induced bone loss.

"Taken together, <u>chlorogenic acid</u> seems to be a hopeful molecule for the development of novel anti-osteoporosis treatment," the researchers note.

More information: Chien-Yi Ho et al, Chlorogenic acid prevents ovariectomized-induced bone loss by facilitating osteoblast functions and suppressing osteoclast formation, *Aging* (2024). DOI: 10.18632/aging.205635

Provided by Impact Journals LLC



Citation: Team finds that chlorogenic acid prevents ovariectomized-induced bone loss (2024, March 26) retrieved 9 May 2024 from https://medicalxpress.com/news/2024-03-team-chlorogenic-acid-ovariectomized-bone.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.