

Retinoid use not associated with fracture risk

May 17 2010

Individuals treated for acne, psoriasis or another skin condition with vitamin A analogues (retinoids) do not appear to be at increased risk of fracture, according to a report in the May issue of *Archives of Dermatology*.

"High doses of vitamin A as dietary intake or supplements have been associated with adverse skeletal effects," the authors write as background information in the article. Very high doses of vitamin A analogues—compounds similar to vitamin A, including isotretinoin and acitretin—may be prescribed to patients for skin conditions. These medications have been associated with bone changes such as impaired markers of bone reconstruction and decreased bone mineral density.

Peter Vestergaard, M.D., Ph.D., Dr.Med.Sc., and colleagues at Aarhus University Hospital, Aarhus, Denmark, used two nationwide registers to identify 124,655 patients with [fractures](#) during the year 2000. For each of these patients, three persons who were the same age and sex but had not sustained a fracture were also selected. A register of medications purchased at pharmacies was then used to determine the use of systemic (affecting the entire body) or topical (applied to the skin) vitamin A analogues.

Neither topical nor systemic vitamin A analogues were associated with the change in [fracture risk](#) at any skeletal site. There were no trends with increasing medication dose or with longer treatment duration, nor with either of the two types of analogues (isotretinoin or acitretin). Even very large daily doses—14 milligrams of vitamin A analogues—were not

associated with an increased risk of fractures.

"Neither acne nor psoriasis, indications for systemic treatment with vitamin A analogues, influenced the risk of fractures," the authors write.

"It thus seems that vitamin A analogues are safe in terms of fractures even at very high doses," they conclude. "Even though some studies have reported a decreased [bone mineral density](#) with high doses of vitamin A as retinol in [dietary intake](#) or as supplements, the decrease may not have been of such magnitude that it altered bone biomechanical competence."

More information: *Arch Dermatol.* 2010;146[5]:478-482.

Provided by JAMA and Archives Journals

Citation: Retinoid use not associated with fracture risk (2010, May 17) retrieved 5 May 2024 from <https://medicalxpress.com/news/2010-05-retinoid-fracture.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.
