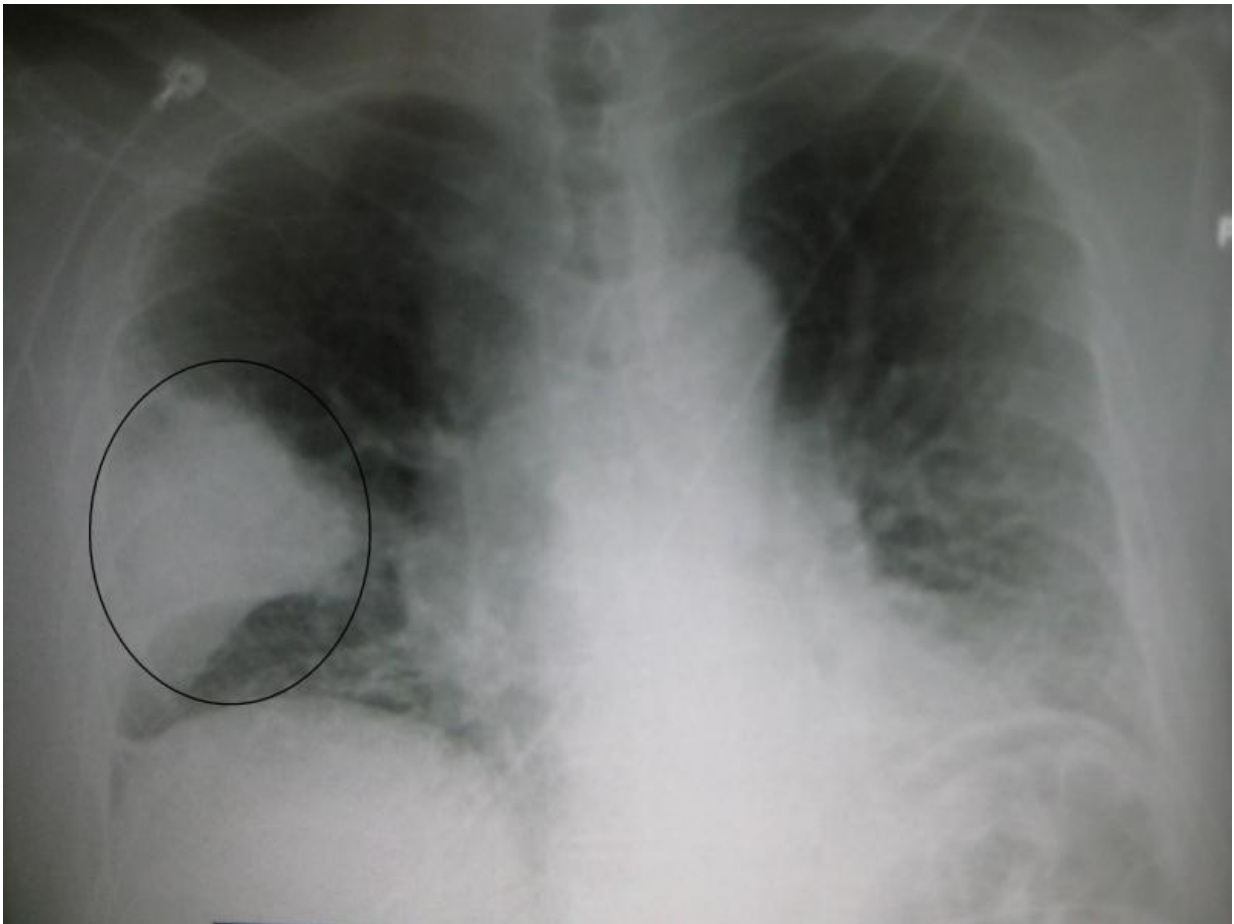


Osteoporosis treatment may also protect against pneumonia

June 3 2020



A black and white X-ray picture showing a triangular white area on the left side. A circle highlights the area. Credit: James Heilman, MD./Wikipedia

A recent study found that nitrogen-containing bisphosphonates (N-BPs) such as alendronate, which are widely used to treat postmenopausal osteoporosis, are linked with lower risks of pneumonia and of dying from pneumonia. The results are published in the *Journal of Bone and Mineral Research*.

The study included 4,041 patients with hip fractures who received N-BPs and 11,802 who did not. Over a median follow-up time of 2.7 years, N-BPs were associated with a 24% lower risk of pneumonia compared with no treatment (69 versus 90 cases per 1,000 people per year).

A similar association was observed with pneumonia mortality, with a 35% [lower risk](#) associated with N-BPs (23 versus 35 per 1,000 patients per year for the N-BP and non-N-BP groups, respectively).

Results from previous animal studies indicate that N-BP treatment leads to a high concentration of N-BPs in the [respiratory tract](#). "Together with its anti-inflammatory and immune-modulatory properties, this may explain why N-BPs were associated with reduced risk of [pneumonia](#), as revealed in our study," said senior author Ching-Lung Cheung, Ph.D., of The University of Hong Kong. He added that studying the potential of N-BPs for treating symptoms of COVID-19 may be warranted.

More information: Chor-Wing Sing et al, Nitrogen-Containing Bisphosphonates Are Associated With Reduced Risk of Pneumonia in Patients With Hip Fracture, *Journal of Bone and Mineral Research* (2020). [DOI: 10.1002/jbmr.4030](https://doi.org/10.1002/jbmr.4030)

Provided by Wiley

Citation: Osteoporosis treatment may also protect against pneumonia (2020, June 3) retrieved 4

May 2024 from <https://medicalxpress.com/news/2020-06-osteoporosis-treatment-pneumonia.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.