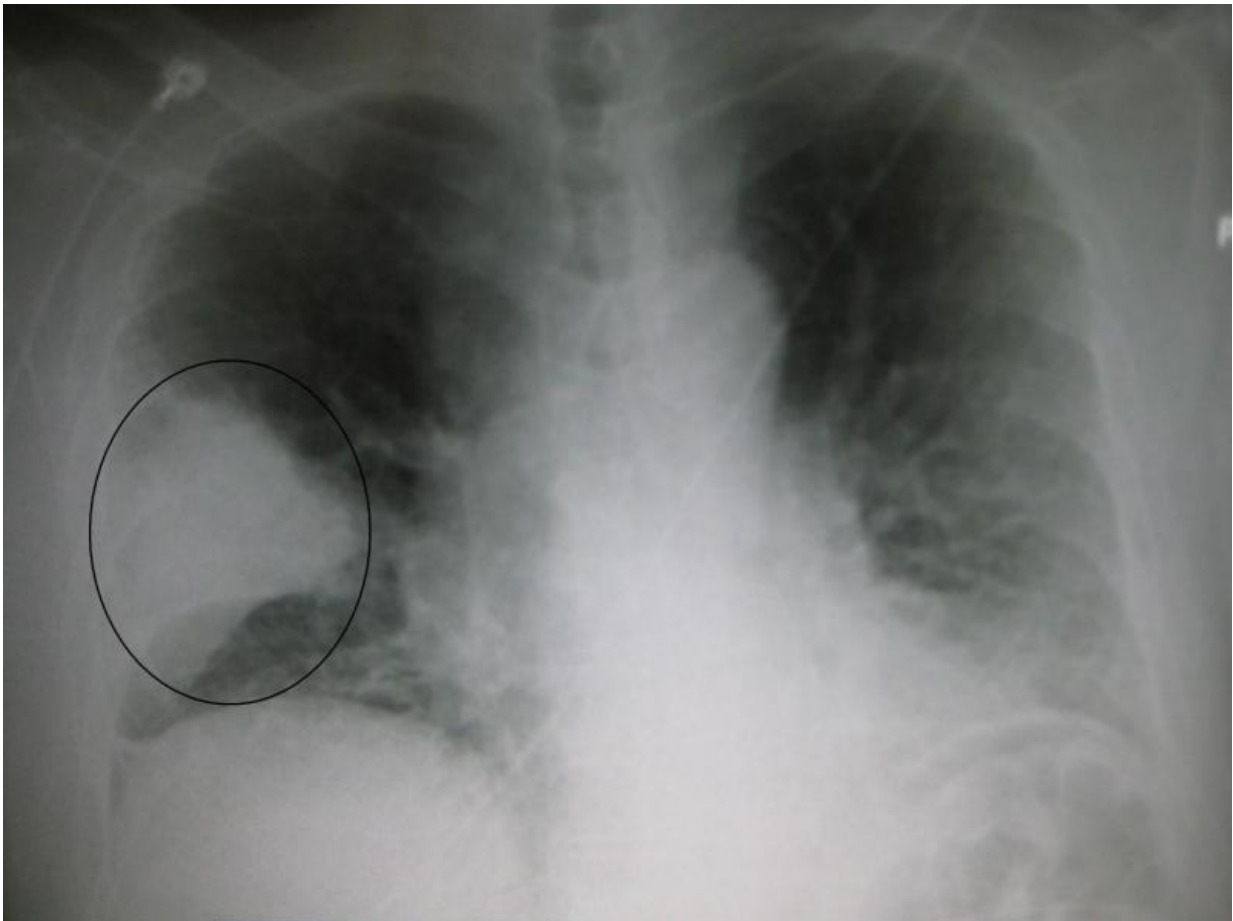


Osteoporosis treatment may also protect against pneumonia

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)

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