

Vitamin D deficiency common in cancer patients

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More than three-quarters of cancer patients have insufficient levels of vitamin D (25-hydroxy-vitamin D) and the lowest levels are associated with more advanced cancer, according to a study presented on October 2, 2011, at the 53rd Annual Meeting of the American Society for Radiation Oncology (ASTRO).

"Until recently, studies have not investigated whether vitamin D has an impact on the prognosis or course of cancer. Researchers are just starting to examine how vitamin D may impact specific features of cancer, such as the stage or extent of tumor spread, prognosis, recurrence or [relapse](#) of disease, and even sub-types of cancer," Thomas Churilla, lead author of the study and a [medical student](#) at the Commonwealth Medical College, Scranton, Pa., said.

Researchers sought to determine the vitamin D levels of patients at Northeast Radiation Oncology Center in Dunmore, Pa., a community oncology practice, and to see if vitamin D levels were related to any specific aspects of cancer. The study involved 160 patients with a [median age](#) of 64 years and a 1:1 ratio of men to women. The five most common primary diagnoses were breast, prostate, lung, thyroid and colorectal cancer. A total of 77 percent of patients had vitamin D concentrations either deficient (less than 20 ng/mL) or sub-optimal (20-30 ng/mL). The median serum vitamin D level was 23.5 ng/mL. Regardless of the age or sex of the patient, levels of vitamin D were below the median predicted for advanced stage disease in the patient group.

Patients who were found to be vitamin D deficient were administered replacement therapy, increasing serum D levels by an average of 14.9 ng/mL. Investigators will be analyzing if vitamin D supplementation had an impact on aspects of treatment or survival in the long-term.

"The benefits of vitamin D outside of improving [bone health](#) are controversial, yet there are various levels of evidence to support that vitamin D has a role in either the prevention or the prediction of outcome of cancer," Churilla said. "Further study is needed to continue to understand the relationship between vitamin D and cancer."

Provided by American Society for Radiation Oncology

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