

Certain factors affect vitamin D levels in children with chronic kidney disease

June 16 2016

Researchers have identified certain modifiable and non-modifiable factors associated with vitamin D deficiency in children with chronic kidney disease (CKD). The findings, which appear in an upcoming issue of the *Clinical Journal of the American Society of Nephrology (CJASN)*, could help physicians protect the health of these young patients.

Vitamin D deficiency is common in children with chronic [kidney disease](#) (CKD). In an attempt to understand why, a team led by Anke Doyon, MD and Franz Schaefer, MD (University of Heidelberg, Germany) looked at how various factors relate to [vitamin](#) D levels in 500 children with CKD who were residing in 12 European countries.

Among the major findings:

- Two-thirds of the patients were classified as vitamin D deficient.
- Patients who took vitamin D supplements had vitamin D levels that were 2 times higher than those who did not take supplements, and they had a lower prevalence of vitamin D deficiency.
- Vitamin D levels were lower for certain kidney abnormalities, such as glomerulopathies
- Vitamin D levels were lower in winter months than at other times of the year.
- Certain genetic variants were also associated with vitamin D levels, but to a lesser extent than disease-associated factors and vitamin D supplementation.

"Vitamin D levels are influenced more strongly by seasonal factors, the type of disease and nutritional supplementation than by common variants in vitamin D regulating genes," said Dr. Doyon. "Supplementation practices should be reconsidered and intervention studies are needed to define guidelines how to monitor and treat vitamin D deficiency in children with [chronic kidney disease](#)."

More information: "Genetic, Environmental and Disease-Associated Correlates of Vitamin D Status in Children with CKD," *CJASN*, June 16, 2016, [DOI: 10.2215/CJN.10210915](https://doi.org/10.2215/CJN.10210915)

Provided by American Society of Nephrology

Citation: Certain factors affect vitamin D levels in children with chronic kidney disease (2016, June 16) retrieved 3 May 2024 from <https://medicalxpress.com/news/2016-06-factors-affect-vitamin-d-children.html>

<p>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.</p>
--