

OVERVIEW

Hyperphosphatemia is a ubiquitous problem in patients with CKD that can be detected and managed to intervene in its contributions to cardiovascular events, bone disease, and morbidity and mortality. It plays an important role in Chronic Kidney Disease-Mineral Bone Disorder (CKD-MBD), which is a systemic disorder manifested by one or more of the following: mineral and hormone abnormalities, bone abnormalities, and vascular and other soft tissue calcification. Beginning in CKD stage 3, the ability of the kidneys to appropriately excrete a phosphate load is diminished, and the resultant hyperphosphatemia is one of a complex set of derangements in calcium, parathyroid hormone, conversion of 25(OH)D to 1,25(OH)2D, and FGF-23. Each of the therapeutic options or hyperphosphatemia—phosphate binders, diet and dialysis dose—presents challenges and opportunities to affect the course of CKD-MBD.

LEARNING OBJECTIVES

After completing this educational activity, you will be able to:

- State evidence-based guidelines on the diagnosis and treatment of Chronic Kidney Disease-Mineral and Bone Disorder (CKD-MBD).
- Describe the prevalence, pathophysiology, and association of CKD-MBD and hyperphosphatemia with adverse conditions, such as fractures and cardiovascular disease.
- Explain current challenges in managing hyperphosphatemia in the CKD patient.
- Discuss evidence-based treatment strategies related to CKD-MBD to facilitate appropriate management aimed toward improving patient outcomes and adherence.
- Enumerate emerging therapies that may be conducive to improved outcomes.

METHOD OF PARTICIPATION

This CME/CE activity is available as an on-demand Webcast at www.kidney.org/cme. To receive a certificate of completion, participants will read a self-directed manuscript presentation with accompanying slides, answer the questions embedded within the presentation, and complete an evaluation. The estimated time for completion is 1.5 hours.

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AUDIENCE

Physicians / Physician Assistants / Nurse Practitioners / Nurses / Dialysis Technicians
Dietitians / Pharmacists

ACCREDITATION

Physician: The National Kidney Foundation is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The National Kidney Foundation designates this live activity for a maximum of 1.5 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Physician Assistant: AAPA accepts certificates of participation for educational activities certified for Category I credit from AOACCME, Prescribed credit from AAFP, and *AMA PRA Category 1 Credit*[™] from organizations accredited by ACCME or a recognized state medical society. Physician assistants may receive a maximum of 1.5 hours of Category I credit for completing this program.

Nurse Practitioner: This program is approved for 1.25 contact hours of continuing education by the American Academy of Nurse Practitioners. Program ID 1010345.

This program was planned in accordance with AANP CE Standards and Policies and AANP Commercial Support Standards.

Nurse and Technician: The National Kidney Foundation is an approved provider of continuing nursing education by the New York State Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

It has been assigned Provider code 7QPLGU-PRV-09.

1.5 contact hours will be awarded.

Dietitian: The National Kidney Foundation is a Continuing Professional Education (CPE) Accredited Provider with the Commission on Dietetic Registration (CDR). Registered dietitians (RDs) and dietetic technicians, registered (DTRs) will receive 1.5 continuing professional education units (CPEUs) for completion of this program/material.



Pharmacist: The University of Illinois at Chicago, College of Pharmacy, is accredited by the Accreditation Council for Pharmacy Education (ACPE) as a provider of continuing pharmacy education. The ACPE universal activity number assigned to this educational offering is 016-999-10-118-H01-P.



This activity is accredited by the University of Illinois at Chicago, College of Pharmacy for 0.15 CEUs (1.5 contact hours).

This activity is knowledge-based.

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Disclaimer: The faculty, National Kidney Foundation, and Mitsubishi Tanabe do not recommend the use of any pharmaceutical, diagnostic test, or device outside of the labeled indications as approved by the FDA. Please refer to the official prescribing information for each product for approved indications, contraindications, and warnings.

REGISTRATION

View this free CME/CE activity at the National Kidney Foundation Web site www.kidney.org/CME. For more information, please call NKF at 800.622.9010, or visit our Web site at www.kidney.org



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Chronic Kidney Disease and Hyperphosphatemia: *In Search of Better Outcomes*

A FREE Webcast CME/CE Learning Activity

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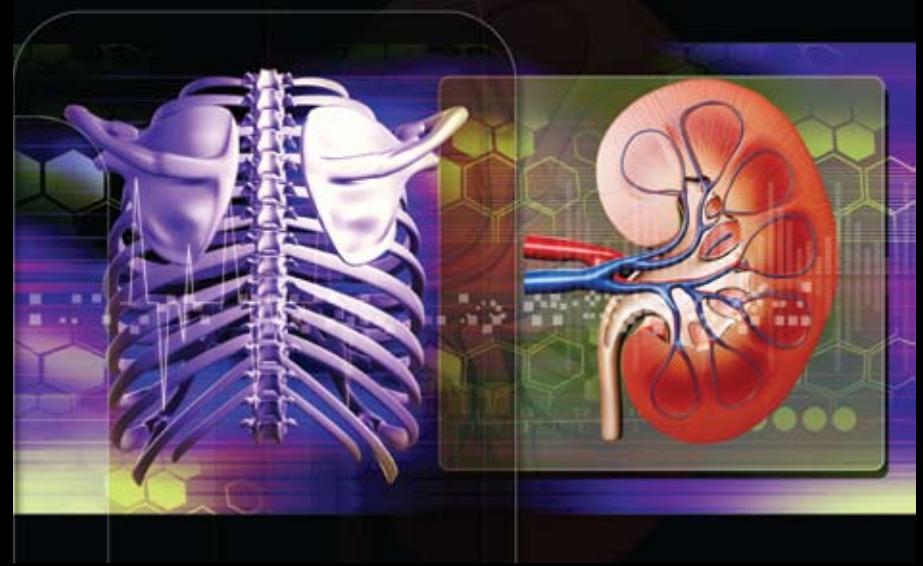


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