BLOOD PHOSPHORUS LEVELS CAN HELP PREDICT KIDNEY FAILURE RISK IN AFRICAN AMERICANS

Highlights

- An increase in serum phosphorus levels in African Americans with chronic kidney disease (CKD) is associated with faster progression to kidney failure, known as end-stage renal disease (ESRD).
- The study confirmed in African Americans what previous studies in Caucasians demonstrated, that an increase in the biomarker predicted ESRD risk.
- The research, from the Indiana University School of Medicine, was presented at ASN Kidney Week 2015 November 3–8 at the San Diego Convention Center in San Diego, CA.

San Diego, CA (November 17, 2015) — An increase in serum phosphorus levels in African Americans with chronic kidney disease (CKD) is associated with faster progression to kidney failure, known as end-stage renal disease (ESRD), according to new research presented at ASN Kidney Week 2015 November 3–8 in San Diego, CA. Previously confirmed in primarily Caucasian populations, the Indiana University School of Medicine study confirms serum phosphorus is linked to ESRD risk in African Americans.

African Americans are more than 3 times as likely to progress to kidney failure as Caucasians and account for 32% of individuals with ESRD. Because of this, Indiana University School of Medicine researchers led by Jonathan Bazeley, MD, wanted to determine if serum phosphorus, which in previous studies of mainly Caucasian populations was associated with adverse outcomes in CKD patients, was an effective predictor in African Americans as well. African Americans and Caucasians differ in how they maintain balance of vitamin D and parathyroid hormone, which is why it was unknown if serum phosphorus levels would be an effective predictor in this population.

Investigators performed a retrospective analysis of 754 predominantly African American patients from an urban CKD clinic who were followed over a period of 2 to 5 years. Serum phosphorus was a significant predictor of progression to the study end point of dialysis initiation (HR 1.44, 95% CI 1.07–1.93), even after controlling for age, sex, race, smoking status, diabetic status, BMI, and other biomarkers.

“The results suggest phosphorus may have independent negative consequences on
CKD progression," the authors concluded. “Testing this would require trials that evaluate lowering serum phosphorus on progression to dialysis.”

Study: “Serum Phosphorus Independently Predicts Risk of ESRD in an Urban CKD Clinic” (Abstract TH-PO560).

Disclosure information is available at [http://www.asn-online.org/education/kidneyweek/2015/program-faculty.aspx](http://www.asn-online.org/education/kidneyweek/2015/program-faculty.aspx).

ASN Kidney Week 2015, the largest nephrology meeting of its kind, provided a forum for more than 13,000 professionals to discuss the latest findings in kidney health research and engage in educational sessions related to advances in the care of patients with kidney and related disorders. Kidney Week 2015 was held November 3–8, 2015, in San Diego, CA.

The content of this article does not reflect the views or opinions of The American Society of Nephrology (ASN). Responsibility for the information and views expressed therein lies entirely with the author(s). ASN does not offer medical advice. All content in ASN publications is for informational purposes only, and is not intended to cover all possible uses, directions, precautions, drug interactions, or adverse effects. This content should not be used during a medical emergency or for the diagnosis or treatment of any medical condition. Please consult your doctor or other qualified health care provider if you have any questions about a medical condition, or before taking any drug, changing your diet or commencing or discontinuing any course of treatment. Do not ignore or delay obtaining professional medical advice because of information accessed through ASN. Call 911 or your doctor for all medical emergencies.

Founded in 1966, and with nearly 16,000 members, the American Society of Nephrology (ASN) leads the fight against kidney disease by educating health professionals, sharing new knowledge, advancing research, and advocating the highest quality care for patients.

# # #