Treatment for sickle cell disease may help protect patients' kidney function

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A drug used to treat sickle cell disease may provide an added benefit of protecting patients' kidney function, according to a study appearing in an upcoming issue of the *Journal of the American Society of Nephrology* (*JASN*).

Sickle cell disease, a blood disorder, can impact the function of the kidneys, and the earliest sign of kidney damage in affected patients is albuminuria, or the presence of albumin in the urine.

Hydroxyurea (HU), which makes red blood cells more flexible, is one of the cornerstones of sickle cell disease treatment, but its effects on kidney function are unclear. To investigate, Pablo Bartolucci, MD, PhD, Vincent Audard, MD, PhD (Université Paris-Est Créteil, in France), and their colleagues studied 58 adults with sickle cell disease who were starting HU therapy. After 6 months of treatment, patients' kidney function, as measured by the urinary albumin/creatine ratio, improved significantly.

"The findings offer further evidence, albeit not yet definitive, of a potential renal benefit of HU, and should strengthen arguments favoring its use in sickle cell disease for other indications and encouraging patient adherence to this drug," said Dr. Bartolucci. "Our preliminary results require additional larger, prospective, randomized, controlled trials to clearly demonstrate the positive effect of HU to reduce albuminuria levels and delay chronic kidney disease progression," added Dr. Audard.

More information: The article, entitled "Six Months of Hydroxyurea Reduces Albuminuria in Patients with Sickle Cell Disease," will appear online at jasn.asnjournals.org/ on November 19, 2015.

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