Heart healthy lifestyle may cut kidney disease patients' risk of kidney failure

May 23 2013

Maintaining a heart healthy lifestyle may also help protect chronic kidney disease patients from developing kidney failure and dying prematurely, according to a study appearing in an upcoming issue of the *Journal of the American Society of Nephrology* (*JASN*). The findings suggest that patients with kidney disease should be encouraged to improve their heart health.

Poor kidney health puts people at risk of developing heart problems, but it's unclear whether the opposite is true. Does heart health also affect kidney health?

To investigate, Paul Muntner, PhD (University of Alabama at Birmingham) and his colleagues used the American Heart Association's recently published tool (Life's Simple 7) that helps individuals assess their heart health. Life's Simple 7 lists seven domains including not smoking, being physically active, following a heart healthy diet, having a normal weight, and maintaining low blood sugar, blood pressure, and cholesterol levels. "Scores on the Life's Simple 7 tool have been associated with risk for having a heart attack but it was unclear whether a worse profile would be associated with an increased risk for developing kidney failure," said Dr. Munter.

The investigators looked for a link between Life's Simple 7 components with both kidney failure and death among 3,093 individuals with stage 3 or 4 chronic kidney disease. During an average follow-up of four years, 160 participants developed kidney failure and 610 participants died.

Among the major findings:

- Compared with individuals who had zero or one of the Life's Simple 7 components in the "ideal" range, those with two, three, and four ideal factors had progressively lower risks for kidney failure. People with four ideal factors cut their risk by nearly half.
- No participant with five to seven ideal factors developed kidney failure.
- Participants' risk of dying during the study followed similar trends, with those having four ideal factors cutting their risk by more than 40%.
- The relationship between ideal levels of Life's Simple 7 components and kidney failure and death was explained by individuals' kidney function levels, suggesting that kidney disease may confound or mediate the link between health behaviors and health.

"This study highlights the importance of maintaining a healthy lifestyle, not just on patients' risk for developing heart disease but also for the prevention of kidney failure," said Dr. Muntner. People who wish to evaluate their heart health can go to http://mylifecheck.heart.org/PledgePage.aspx?NavID=5&CultureCode=en-US to see how they can improve their heart health.

In an accompanying editorial, Andrew Chin, MD and Lorien Dalrymple, MD (University of California, Davis) noted that "this study provides an opportunity to reconsider and reevaluate our approach to modifying health behaviors and factors in individuals living with CKD." They added that whether a combination of health behavior changes in conjunction with optimal management of health factors alters the progression of CKD remains a topic worthy of continued study.

More information: The article, entitled "Cardiovascular Risk factors in CKD Associate with Both ESRD and Mortality," will appear online on May 23, 2013, doi: 10.1681/ASN.2012070642
The editorial, entitled "Ideal Cardiovascular Health and Progression of CKD: Perhaps not so 'Simple'," will appear online on May 23, 2013, doi: 10.1681/ASN.2013040388

Provided by American Society of Nephrology

Citation: Heart healthy lifestyle may cut kidney disease patients' risk of kidney failure (2013, May 23) retrieved 25 April 2024 from https://medicalxpress.com/news/2013-05-heart-healthy-lifestyle-kidney-disease.html

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.