

Weight-loss surgery may improve kidney function

November 14 2014

In addition to helping patients shed pounds, weight loss surgery may also improve kidney function, according to a study that will be presented at ASN Kidney Week 2014 November 11-16 at the Pennsylvania Convention Center in Philadelphia, PA.

Weight loss, or bariatric, surgery is highly effective for rapid [weight loss](#) in patients with morbid obesity, who are at markedly increased risk for [kidney failure](#). Because the effect of [bariatric surgery](#)-induced weight loss on [kidney function](#) is unknown, Alex Chang, MD (Geisinger Medical Center) and his colleagues examined the kidney health of patients who underwent bariatric surgery.

A total of 3134 participants were followed for a median of 2.4 years. One year after bariatric surgery, average weight decreased from 130.1 to 90.9 kg, average body mass index decreased from 46.8 to 32.6 kg/m², and average kidney function (estimated glomerular filtration rate, or eGFR) increased from 94.8 to 99.1 ml/min/1.73m². Every 5 kg of weight loss was associated with a 0.50 ml/min/1.73m² increase in eGFR. The association between weight loss and increased eGFR was stronger in patients with [chronic kidney disease](#) at the start of the study than in those without. In the subset of 108 patients with albuminuria, or protein excretion in the urine (a marker of [kidney dysfunction](#)) at the start of the study, weight loss was associated with resolution of albuminuria.

Dr. Chang noted that the current clinical standard to measure kidney function, creatinine, is influenced by muscle mass, which may change

with drastic weight loss. Additional studies using other markers of kidney function are needed to confirm the study's findings and to examine the effect of weight loss on long-term kidney outcomes.

"Bariatric surgery serves as a good model to examine the effects of weight loss on kidney function. Our findings suggest a beneficial impact on kidney function in patients with and without baseline kidney disease," said Dr. Chang. "More emphasis should be placed on promoting healthy lifestyles to avoid morbid obesity, and prevent chronic kidney disease."

More information: Study: "Weight Loss after Bariatric Surgery Is Associated with Increased eGFR and Decreased Albuminuria" (Abstract FR-OR024)

Provided by American Society of Nephrology

Citation: Weight-loss surgery may improve kidney function (2014, November 14) retrieved 24 April 2024 from

<https://medicalxpress.com/news/2014-11-weight-loss-surgery-kidney-function.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>
--