

Reducing risk of renal failure in obese patients

April 28 2011

The angiotensin-converting enzyme (ACE) inhibitor drug, ramipril, is particularly effective in lowering the risk of end-stage renal disease (ESRD) in obese patients, according to a study appearing in an upcoming issue of the *Journal of the American Society of Nephrology* (JASN).

"Obese patients with kidney disease progress more quickly towards [renal failure](#) compared to non-obese patients, and ramipril virtually abolishes this excess risk," comments Carmine Zoccali, MD (CNR-IBIM and Ospedali Riuniti di Reggio Calabria, Italy).

The researchers analyzed data from a previous trial comparing ramipril with an inactive placebo in 337 patients with non-diabetes-related [chronic kidney disease](#) (CKD). Rates of progression to ESRD on the two treatments were compared in obese and overweight patients versus normal-weight patients.

On placebo, the risk of developing ESRD was more than twice as high for obese patients compared to normal-weight patients: 24 versus 10 per 100 person-years. For patients who were overweight but not obese, ESRD risk was similar to that in normal-weight patients.

Ramipril lowered the risk of progression to ESRD in all three weight groups. However, the magnitude of risk reduction was much greater for obese patients: 86 percent, compared to 45 percent in normal-weight patients. Thus, obese patients taking ramipril exhibited about the same ESRD risk as normal-weight patients.

"Obesity is now the most frequent cause of CKD," according to Zoccali. "In the United States, one out of four patients starting dialysis is obese." Ramipril and other ACE inhibitors are frequently used to treat CKD in patients with high levels of protein in the urine (proteinuria), like the ones in the study.

"Our findings strongly suggest that ACE inhibitors should be preferentially used in obese patients to prevent kidney disease moving to the most advanced stages," Zoccali concludes. He calls for further analyses to confirm the results, as well as new trials specific to obese patients with CKD.

As a new analysis of a previous clinical trial, the study cannot be considered as definitive proof that ACE inhibitors have any special impact in obese patients with CKD. In addition, the study focused on kidney disease associated with high levels of proteinuria; it's unknown whether [ACE inhibitors](#) will have the same protective effect in patients with lower levels of proteinuria. Furthermore, the patients were all white Europeans; the results need to be confirmed in studies including other ethnicities.

More information: The article, entitled "ACE Inhibition Is Renoprotective among Obese Patients with Proteinuria" will appear online on April 28, 2011, [doi 10.1681/ASN.2010090969](https://doi.org/10.1681/ASN.2010090969)

Provided by American Society of Nephrology

Citation: Reducing risk of renal failure in obese patients (2011, April 28) retrieved 20 November 2023 from <https://medicalxpress.com/news/2011-04-renal-failure-obese-patients.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.