

Ultrafiltration may not be best approach for heart failure patients, research finds

November 7 2012

Ultrafiltration was no more effective in removing excess fluid from the heart than using standard treatment including diuretics to reduce congestion in [heart failure](#) patients, according to late-breaking clinical trial research presented at the American Heart Association Scientific Sessions 2012.

The full manuscript for Cardiorenal Rescue Study in [Acute Decompensated Heart Failure](#) (CARRESS-HF) is published in the [New England Journal of Medicine](#).

Excess fluid build-up in the body can occur in many [heart failure patients](#) and lead to a need to hospitalize these patients. For decades, physicians have used [intravenous drugs](#) known as diuretics to remove excess fluid. Many heart failure patients may have some degree of abnormality in kidney function and diuretics can lead to further worsening of kidney function.

"We need better treatments for managing hospitalized heart failure patients, but our findings indicate that ultrafiltration may not be the answer," said Bradley Bart, M.D., lead author of the study and chief of cardiology at Hennepin County Medical Center in Minneapolis, Minn.

In the prospective randomized comparison of the treatments, researchers randomly assigned ultrafiltration or a diuretic-based approach to 188 hospitalized patients (average age 68, mostly male) with persistent excess fluid and worsening kidney function. Eighty-four percent had high blood

pressure; 66 percent had diabetes; and 75 percent had at least one recent admission to the hospital for heart failure.

Researchers measured the patients' weight change (as a measure of improved congestion and fluid loss) and kidney function four days after starting treatment, and followed patients for 60 days to see if they remained stable and out of the hospital.

Both groups lost about 12 pounds during the first four days of treatment. [Kidney function](#) worsened in ultrafiltration patients and they also had more side effects. After 60 days, there were no differences between the two groups in either heart failure hospitalizations or death.

"Ultrafiltration is more expensive, more complex and doesn't offer any advantage as administered in this study," Bart said.

"The overall disappointing results of this trial indicate that more research is needed to find better ways to treat these seriously ill patients," said Eugene Braunwald, co-author and chair of the Heart Failure Network that conducted the study.

Provided by American Heart Association

Citation: Ultrafiltration may not be best approach for heart failure patients, research finds (2012, November 7) retrieved 18 April 2024 from <https://medicalxpress.com/news/2012-11-ultrafiltration-approach-heart-failure-patients.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>
--