



ACS	Arrhythmia/EP	Brain/Kidney/Peripheral	Clinical cardiology	Heart failure	Hypertension
Imaging	Interventional/Surgery	Lipid/Metabolic	Prevention	Thrombosis	



HEART FAILURE

# Spironolactone may cut bone–fracture risk in men with heart failure

JULY 10, 2008 Steve Stiles

Recommend

0

Tweet

0

0

Share

0

Comments

Read later

Print

Font size

Cite

Download slides

**Memphis, TN** – Treatment with **spironolactone** in chronic heart failure may have the added benefit of preventing bone fractures, at least in men, suggests a retrospective analysis of patients from a single center [1]. Those who took the aldosterone inhibitor and diuretic in the case–control study showed a >40% drop in adjusted risk of incident fractures, especially if they were on the drug for at least six months.

"This is the first, to our knowledge, determination of the association between spironolactone and fractures," according to the authors, led by **Dr Laura D Carbone** (Veterans Affairs Medical Center and University of Tennessee Health Science Center, Memphis) in the July 8, 2008 issue of the *Journal of the American College of Cardiology*. Acknowledging the observational study's limitations, the group recommends further research into the findings, including randomized trials with bone–density and fracture–related end points.

They identified 167 cases of single–incident bone fractures not caused by trauma, excluding fractures of the skull, facial bones, or ribs, among all men with chronic heart failure seen at their Veterans Affairs center over six years. They were matched 1:4 to 668 patients without fractures from the same heart–failure cohort.

The adjusted odds ratios for total fractures and for "other" fractures (that is, fractures other than of the hip, wrist, or vertebrae) were significantly reduced among men who had taken spironolactone, compared with those who had not. The risks of hip, wrist, and vertebral fractures were unaffected. The spironolactone benefit appeared to be limited to the 156 patients who had been on the drug for longer than six months.

**Effect of spironolactone use and duration of use on fracture risk in men with chronic heart failure, compared with nonuse of spironolactone**

Parameter	OR* (95% CI)	p
<b>Fracture risk by fracture location</b>		
Any fracture	0.57 (0.35–0.95)	0.032
Fractures not of hip, wrist, or vertebrae	0.24 (0.08–0.73)	0.012
<b>Risk of any fracture, by treatment duration</b>		
≤6 mo	0.63 (0.28–1.45)	0.278
>6 mo	0.55 (0.31–0.98)	0.043

\*Adjusted for smoking, body–mass index, prevalent fracture, and medications

To download table as a slide, click on slide logo above

"Even at the low doses of spironolactone used in our study (mean dose 25 mg/day), there was an inverse association with fractures," write Carbone et al. "This has important therapeutic implications because in clinical practice, low rather than high doses of spironolactone are more commonly prescribed."

Tweet

0

0

Share

Recommend

Be the first of your friends to recommend this.

Chinese herbal medicine shows promise in HF in early trial  
JUN 4, 2013 15:30 EDT

## Featured CME



Optimizing Outcomes in AHF: Does Time Matter?

Nitric Oxide Therapy for Heart Failure in African Americans

[View all CME programs >>](#)


Inside: Heart failure

More

What is PAH?

Evaluation and Risk Stratification in the HF World: Role for Imaging?

## Source

1. Carbone LD, Cross JD, Raza SH, et al. Fracture risk in men with congestive heart failure; risk reduction with spironolactone. *J Am Coll Cardiol* 2008; 52:135-138. 

## Related links

- [Beta blockers reduce risk of fractures](#)  
[HeartWire > News; Sep 14, 2004]
- [Thiazide diuretics associated with lower risk of hip fracture](#)  
[HeartWire > News; Sep 15, 2003]

You must be a member (with full membership) to post a comment.

## Already a member?

Enter your login information below:

☒ Remember me on this computer

[Forgot your username and/or password?](#)

[Login](#)

## Enjoy all the benefits of theheart.org

With **full membership**, you can check out our educational and editorial content, search the site, receive our newsletters, join discussions, download slides and much more.

**Membership is free!**

[Join now for full access](#)


 [Blogs](#)

 [Radio](#)

 [Social Hub](#)

 [Mobile](#)

 [iPhone](#)

 [Subscribe to RSS feed](#)

 [Forum](#)

[Home](#) | [ACS](#) | [Arrhythmia/EP](#) | [Brain/Kidney/Peripheral](#) | [Clinical cardiology](#) | [Heart failure](#) | [Hypertension](#) | [Imaging](#) | [Interventional/Surgery](#) | [Lipid/Metabolic](#) | [Prevention](#) | [Thrombosis](#)

[Like](#)

4,864 people like this. Be the first of your friends.

[Follow @theheartorg](#)

13.7K followers

We comply with the **HONcode standard** for trustworthy health information: [verify here.](#)



Copyright ©1999–2012 theheart.org by WebMD. All rights reserved.

All material on this website is protected by copyright.

[Terms of use](#) | [Privacy policy](#) | [About theheart.org](#) | [Help](#) | [Site map](#) | [Contact us](#) | [Work for us](#)