

Higher BMI is associated with lower mortality risk in patients with severe PH

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In patients with congestive heart failure, obesity and a larger waist size have paradoxically been associated with a better prognosis in the prior investigations. This effect, known as the obesity paradox phenomenon, is now being demonstrated in patients with severe pulmonary hypertension.

"Obesity-related illnesses, particularly [obesity hypoventilation syndrome](#) and sleep apnea, may play a role in the development of pulmonary hypertension, and so we examined whether the protective effects of obesity seen in patients with heart failure were also seen in these patients," said researcher Jose Caceres, MD, of Jacobi Medical Center/Albert Einstein College of Medicine in the Bronx, NY. Pulmonary hypertension is high blood pressure in the arteries going to the lung.

"In our study of more than a thousand patients with significant pulmonary hypertension, we found that a higher body mass index (BMI) was associated with a reduced mortality risk, even after adjustment for baseline characteristics," stated co-researcher M. Khalid Mojadidi, MD.

The study was presented at the 2014 American Thoracic Society International Conference.

The study involved 1137 patients with significant pulmonary hypertension ([pulmonary artery](#) systolic pressure > 60 mmHg), including 361 with a normal BMI (group A), 639 with obesity (Group B), and 137 with [morbid obesity](#) (Group C).

One-year mortality rates were 34.1%, in Group A, 22.8% in Group B, and 12.4% in Group C, yielding a lower relative risk (RR) for one-year mortality in groups B (RR 0.616; 95% confidence interval [CI] 0.484-0.530) and C (RR 0.306; 95% CI 0.184-0.508) compared to Group A. One-year readmission rates however did not significantly differ between groups.

"An obesity paradox may also occur in patients with significant [pulmonary hypertension](#)," said lead author Dr. Ronald Zolty. "A possible mechanism underlying this phenomenon is increased levels of serum lipoproteins associated with increased body fat, which may play a role in neutralizing circulating toxins and inflammatory proteins."

More information: Abstract 54123, Mortality In Patients With Pulmonary Hypertension And High Body Mass Index, Scientific Abstract , 18.10 - Pulmonary Hypertension: Clinical – Treatment and Outcomes (PC) , J.D. Caceres¹, M.K. Mojadidi¹, P. Eshtehardi¹ R. Zolty¹; ¹Jacobi Medical Center/Albert Einstein College of Medicine - Bronx, NY/US

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