Older patients with 1 type of heart failure may receive little or no benefit from drugs

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People over 80 years of age suffering from a certain type of heart failure do not appear to benefit from most commonly prescribed heart medications, according to a study conducted at the Cedars-Sinai Heart Institute and published in the March 15 issue of The *American Journal of Cardiology*.

"The American population continues to live longer lives, often surviving with heart failure and other chronic conditions, but patients in this age range are typically excluded from medical research. Our review of 142 patient cases found that medications had little if any beneficial effect on five-year survival or rehospitalization for heart problems among elderly patients who have heart failure but an ejection fraction of at least 50 percent," said Cedars-Sinai Heart Institute cardiologist Ernst R. Schwarz, M.D., Ph.D., the article's senior author.

Ejection fraction is a measure of the pumping capacity of the left ventricle, the main pumping chamber of the heart. Heart failure with "preserved ejection fraction" - a prevalent condition in the geriatric population - is characterized by the heart contracting well but failing to relax, which prevents the chamber from properly filling with blood. Often termed "diastolic heart failure," this type of heart failure is more prominent than other forms among the elderly, women, and obese people but, like other types of heart failure, it typically has a poor prognosis and a very high mortality rate.

The authors noted that while the study found no proven benefit for drug therapy in this group of patients, cardiovascular medications are often prescribed, at both financial and physiologic cost. They urge special caution in prescribing digoxin and diuretics - medications that are often used to treat congestive heart failure and other cardiac conditions - because the study showed a trend toward increased mortality.

The average age of patients in this study was 87 years at the time of initial hospitalization with heart failure; 31 percent of the subjects were men. Sixty-nine percent of the patients died during the five-year follow-up, and none of the drug therapies - statins, angiotensin-converting enzyme inhibitors/angiotensin II receptor blockers, beta blockers, diuretics, calcium channel blockers, nitrates, and digoxin - appeared to make a significant difference in which patients survived and which did not.

"The risk of adverse drug effects in the geriatric population is high. Because older patients may be taking multiple medications for a variety of medical conditions, and because drugs may affect older people differently than they do younger people, it is important for physicians to prescribe heart medications judiciously and account for a different and often more severe side effect spectrum" said Schwarz, professor of medicine at Cedars-Sinai Medical Center, medical director of the Cardiac Support Program and co-director of the Heart Transplant Program at the Cedars-Sinai Heart Institute. The study points out that more research is needed to evaluate the effects of therapies among the very elderly patients with heart failure.

More information: *The* American Journal of Cardiology, "Value of Medical Therapy in Patients >80 Years of Age with Heart Failure and Preserved Ejection Fraction," March 15, 2009.

Source: Cedars-Sinai Medical Center