

Research Project Funded to Study Heart Valve Disease

Photo: Dr. Alan Morrison, cardiologist at the Providence VA Medical Center and assistant professor of medicine at the Warren Alpert Medical School of Brown University. Morrison was awarded a 12-month pilot project Aug. 29 through Ocean State Research Institute to study the thickening and hardening of aortic heart valves. (Photo courtesy of Dr. Alan Morrison)

A cardiologist at the Providence VA Medical Center was awarded a 12-month pilot project Aug. 29 through Ocean State Research Institute to study the thickening and hardening of aortic heart valves.

Dr. Alan Morrison, who is also an assistant professor of medicine at the Warren Alpert Medical School of Brown University, said his team's long-term goal is to develop new treatments to improve the survival rate and quality of life for Veterans with calcific aortic valve disease.

Coronary heart disease is the leading cause of death for U.S. Veterans. The condition is caused by a build-up of cholesterol-laden plaque, which can become calcified and lead to increased risk of heart attack or death.

Morrison said previous research identified some key inflammatory signals associated with the calcification of plaque in the hearts of Veterans. "It turns out that, as we inhibited the calcification of plaques, we also slowed aortic valve thickening and hardening," said Morrison. "We hope to apply what we've learned to develop effective treatments for aortic stenosis."

Calcific aortic stenosis is a heart valve disease that causes gradual thickening and narrowing of the aortic valve in the heart. Currently there is no known therapy to slow or prevent

this process in affected patients.

“This is an exciting example of the kind of research we are doing here,” said Dr. Susan MacKenzie, director of the Providence VAMC. “Research like this may not only help us provide the exceptional care Veterans have earned, but could benefit the general population, as well.”