CARDIAC CARE

A device that keeps hearts beating

A mechanical pump designed as a 'bridge to transplant' also helps some hearts recover

As many as 100,000 people in the United States each year need heart transplants. But with only 2,500 annual donors, most of these patients must wait until a suitable heart is available. For patients awaiting a donor heart, a mechanical pump called a ventricular assist device (VAD) has served as a "bridge to transplant." VADs aid the pumping action of a weakened heart ventricle, working

with the patient's own heart to pump sufficient blood through the body.

At Westchester Medical Center, home to the only comprehensive cardiac and heart surgery program in the region, doctors are now using VADs not only as a prelude to a transplant, but also as a temporary support for hearts that will regain full function.

"VADs were intended to be used for a short time until a donor heart became available," says Steven Lansman, M.D., Chief of Cardiac Surgery at Westchester. "But we think the most potentially important group that can benefit are the thousands

of patients who are *not* transplant candidates."

Dr. Lansman and a longtime colleague, David Spielvogel, M.D., Westchester's new Director of Heart Transplantation, were directors of the heart/lung transplant and mechanical assist



Steven Lansman, M.D.

It's never too late Think you're too old for exercise to make a difference? Think again. A study reported in the journal *Heart* found that people who'd been sedentary till at least age 40 and then took up exercise cut their risk of heart disease by 55 percent compared with those who remained couchbound. (That's no license for teens and young adults to procrastinate, however; for lifelong exercisers the odds were better still.)

device programs at New York's Mount Sinai Hospital. They agree that certain patients whose hearts have been severely damaged or weakened by a catastrophic cardiac event, VADs can provide support while their heart recovers. In the past, these patients might have suffered permanent, debilitating damage to other organs or even died.

One of the first to reap the benefits of the

new use of this technology at WMC's Heart Center was a 62-year-old law professor who was admitted to the emergency room with a severe heart attack. "Because the damage was primarily to the right side of his heart, he needed support for that area until he recovered," says Dr. Lansman. "We implanted a right ventricular assist device that helped his heart pump blood from the right chamber to his lungs," he explains.

"In two weeks, we were able to wean him from the device, because his heart was ready to take over."

State-of-the-art care for the heart

Westchester Medical Center's cardiology and cardiothoracic services provide advanced diagnosis, treatment and surgery to infants, children and adults for a variety of heart disorders. The center is home to some of the world's leading cardiologists and cardiac surgeons, who perform thousands of successful procedures each year. These include open-heart surgery, heart transplantation, angioplasty (a nonsurgical procedure that increases oxygen and blood flow through a clogged artery) and cardiac catheterization (a diagnostic procedure that identifies potential heart and artery problems). The Heart Center's cardiac catheterization lab, open 24 hours a day, is one of the busiest on the East Coast, performing 5,000 diagnostic catheterizations annually. As the teaching hospital for New York Medical College, the Heart Center also maintains a clinical research program and participates in many major national studies on new cardiac techniques and drug therapies.

To find out more about Westchester's Heart Center, please call 866-WMC-HEART or go to www.worldclassmedicine.com.