High-energy clamp used in a-fib surgery

October 10 2006

U.S. surgeons say they're helping start a new era in the surgical treatment of atrial fibrillation by using a high-energy device instead of a scalpel.

Washington University School of Medicine surgeons say they are using radiofrequency devices to greatly shorten the surgery and make it significantly easier to perform.

"Because of the devices, the procedure -- called the Cox-Maze procedure -- has gone from an operation that hardly anyone was doing to one that (up to) 90 percent of U.S. heart surgeons are now performing," said Dr. Ralph Damiano Jr., chief of cardiac surgery at the school.

For some patients, medications can control the abnormal heart rhythms produced by atrial fibrillation, but they do not cure the disorder. The Cox-Maze procedure has a greater than 90 percent cure rate.

The radiofrequency devices deliver high-energy waves, quickly creating scars or ablations, which replace most of the complex incisions required by the Cox-Maze procedure. The ablations disrupt the atria's abnormal electrical activity and normalize heart rhythm.

The procedure reduces the time needed for the operation from more than 90 minutes to about 30 minutes.