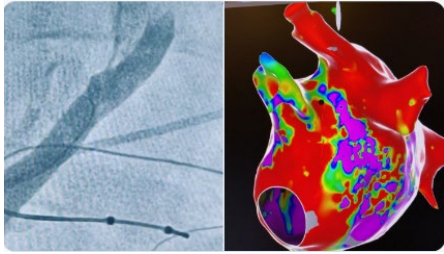


## **Vein of Marshall Alcohol Ablation Improving AFib, Atrial Flutter**



The Virtua heart rhythm team is now performing vein of Marshall alcohol ablation as an adjuvant treatment for persistent atrial fibrillation (AFib) and atrial flutter.

“As we’ve mapped the electrical activity of the heart, we’ve learned that the triggers for atrial fibrillation and flutters are usually located within the veins that enter the left and right atrium, like the pulmonary veins and coronary sinus, a branch of which is the vein of Marshall,” said Virtua heart rhythm specialist Aatish Garg, MD, who performed the first procedure.

Following traditional radiofrequency ablation of the inner surface of the heart, another catheter is threaded to the coronary sinus and the vein of Marshall, which travels on the outer surface of the left atrium. Expanding a special balloon within the vein of Marshall, 5 to 10 cc of pure alcohol is injected into the vein, destroying the tissue causing the irregular heartbeat.

Studies show the vein of Marshall alcohol injection procedure can increase the success rate of catheter ablations by 10 to 15% for persistent AFib, and by more than 30% for atrial flutter from the left atrium. This could reduce the need for repeat ablations and cause a significant improvement in patients’ quality of life, said Dr. Garg.

“The more we understand the physiology of the heart, the more we see the triggers for AFib and the circuit for atrial flutters residing within the vein of Marshall, which had been hiding itself along the outer surface of the heart for so long,” said Dr. Garg. “Now we have a minimally invasive means to correct it.”