



His-Bundle and Left Bundle Branch Pacing at RUSH

Traditional pacemaker leads are placed in the top and bottom-right chambers of the heart. When the bottom-right chamber is stimulated with a high burden for a long period of time, it can lead to dyssynchrony in the bottom chambers. This can lead to adverse clinical outcomes, which include heart failure, cardiomyopathy and atrial fibrillation. His-bundle pacing has demonstrated superior clinical outcomes in comparison with conventional right ventricular pacing.

His-bundle pacing works by implanting a permanent pacing lead at the bundle of His, which is part of the atrioventricular conduction system, at a site that is distal to where the atrioventricular blockers are. This activates both bottom chambers in a synchronized fashion, thereby preventing some of the adverse effects of right ventricular pacing. The hope is to preserve normal biventricular activation with pacing or to potentially normalize biventricular activation in patients who have a bundle branch block.

Left bundle branch pacing is a newer option for placement of leads on the electrical conduction system distal to sites of disease that seems to have similar benefits as His-bundle pacing.

Our Capabilities

High Success Rate

One of the key benefits of His-bundle pacing and left bundle branch pacing is that there is very little chance of causing cardiac perforation. Rush has successfully implanted over 400 His-bundle and left bundle branch pacemakers since 2016 and has a 98 percent success rate.

Expert Care

Rush was one of the early adopters of His-bundle pacing in the United States. Our electrophysiologists are world leaders and provide patients with advanced treatment options for various heart conditions. Rush providers have published more than 80 studies on His-bundle and left bundle branch pacing and are investigators for some of the latest clinical trials.

Short Hospital Stay

After the procedure, patients stay in the hospital overnight. X-rays are done the following morning to ensure the leads are still in place. After the parameters on these leads are checked and stable, patients can be discharged.

His-Bundle Pacing Registry and Other Trials

This registry seeks to gain a broader understanding of the His-bundle pacing device implant and follow-up workflows, including device programming. There are currently 75 participating centers worldwide. In addition, Rush has many other ongoing trials on His-bundle and left bundle branch pacing to help understand the benefits of these pacing modalities.

Proctorship Program

Rush is one of the few centers across the United States that not only performs His-bundle pacing, but is a proctorship site where physicians from across the world come and train on this technique.

Locations

Rush University Medical Center

Professional Building 1725 W. Harrison St. Suite 1159 Chicago, IL 60612

Rush Oak Park Hospital

610 S. Maple Ave. Suite 5500 Oak Park, IL 60304

Rush River North

539 N. Dearborn St. Chicago, IL 60654

Rush South Loop

1411 S. Michigan Ave. Chicago, IL 60605

Nationally Ranked Care



Our Providers



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