

# Alcohol septal ablation provides relief to patients with obstructive hypertrophic cardiomyopathy

December 16 2021

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The unique beat of each person's timed ticker has been pronounced just as identifiable as a fingerprint by some biotech companies. And while

each heart may beat to a different rhythm, this rhythm should remain steady—patterned and predictable.

The consistent pulsing and pumping of the heart provides [oxygen-rich blood](#) to the entire body when working properly, but heritable heart diseases like [hypertrophic cardiomyopathy](#) (HCM) can knock the beat off rhythm.

While HCM is a lifelong disease, symptoms of fatigue, chest pain, fainting and shortness of breath can sometimes be managed through medication-based treatment but not always. Previously, the only surgical option for patients was an open-heart surgery known as surgical septal myectomy, but after assessing the long-term outcomes of a newer minimally invasive surgical option known as alcohol septal ablation (ASA), researchers at MUSC Health have recently reported [positive outcomes](#) in the *Journal of Invasive Cardiology*.

In the longest follow-up study of the procedure, researchers followed the development of ASA over the last 2 decades. Valerian Fernandes, M.D., an interventional cardiologist at MUSC Health and lead author on the paper, says MUSC Health has been a leader in the evolution of the procedure since its inception at Baylor College of Medicine in the 1990s.

"This is the first time we've examined the long-term outcomes of ASA like this, since it is a relatively new procedure," Fernandes said. "And we had such positive results."

With HCM, the wall between the lower chambers of the heart—the ventricular septum—thickens. This unusual muscle thickness causes muscle stiffness and often results in a narrowing of the chamber and reduced blood outflow from the heart. If the [left ventricle](#) blocks blood flow, it is known as obstructive HCM or HOCM, and this form affects over two-thirds of people with HCM.

ASA is a minimally invasive procedure that relieves symptoms of HCM and reduces future complications of the disease. Fernandes and his colleagues perform ASA by guiding a thin catheter through either the radial or the femoral artery up to the heart and then injects alcohol selectively into the abnormally thick [heart](#) muscle, causing the muscle to shrink. Patients often feel immediate relief and go home within a few days of the procedure.

According to Fernandes, ASA provides outcomes similar to surgical myectomy but with less procedural risk and shorter recovery times for patients. Fernandes and his team found that 94% of patients experienced symptom relief immediately following the procedure. In addition, they reported that ASA is equally as effective as surgical myectomy when looking at patients over the course of two decades.

"I was part of the team at Baylor that first started performing the ASA procedure in the 90s before coming to MUSC," Fernandes said. "And I have loved having the opportunity in that time to improve upon a procedure that makes patients' lives better while offering both an easier recovery as well as the same benefits as [open-heart surgery](#)."

**More information:** Long-Term Survival After Alcohol Septal Ablation for Hypertrophic Obstructive Cardiomyopathy: A 16-Year Experience, [pubmed.ncbi.nlm.nih.gov/34559674/](https://pubmed.ncbi.nlm.nih.gov/34559674/)

Provided by Medical University of South Carolina

Citation: Alcohol septal ablation provides relief to patients with obstructive hypertrophic cardiomyopathy (2021, December 16) retrieved 15 June 2024 from <https://medicalxpress.com/news/2021-12-alcohol-septal-ablation-relief-patients.html>

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