

SHOULD I ABLATE OR WAIT? AGGRAVATING ARRHYTHMIAS

One of the most disturbing sensations is when your heart is racing without warning. It can result in sensations of numbness, tingling, chest pressure, headaches, lightheadedness and at its extreme dizziness to the point of fainting. Many arrhythmias result from an obvious trigger that when eliminated prevents a recurrence. In other cases, using simple medications like beta blockers or calcium channel blockers may suppress the arrhythmia. However, in some situations the arrhythmias are related to structural abnormalities of the heart's electrical system. In such situations, an ablation procedure might be worthwhile.

An ablation is an invasive procedure that is performed by specialized cardiologists known as electrophysiologists. It involves putting catheters and electrodes up into the heart through the neck or groin. The electrical pathways of the heart are then mapped out and sometimes the heart is stimulated to try to provoke the arrhythmia. Once it is identified where the arrhythmia is originating from, energy is delivered to burn that part of the electrical pathway. The energy is usually radiofrequency but can also be cryotherapy. In either case, it destroys the electrical fiber, which will prevent the arrhythmia from occurring again. In some cases this delivers a cure. However, in other cases, new pathways take over and a new arrhythmia returns.

Therefore, the question becomes when is it worthwhile to consider an ablation. Some of the key factors to consider is how distressing is the arrhythmia, what is the success rate, what is the experience of the electrophysiologists performing the procedure, and what are the short and long term complications.

There are arrhythmias related to a short PR interval on an EKG. The most common is called WPW-Wolff-Parkinson-White syndrome. The success rate for ablation of this arrhythmia is very high and should be considered in any one who ends up with a racing heart. It usually provides a cure with rare recurrence and often leaves the individual not needing any medications. It should not be done in individuals who have an abnormal EKG but have never had a racing heart.

The most common type of racing heart is a SVT-supraventricular tachycardia. The success rate for this ablation is also very high but there is a chance of recurrence from other pathways. It sometimes may require ongoing low doses of medications and has a very small risk of requiring a pacemaker. Experience of the electrophysiologist is important.

Atrial flutter is another common arrhythmia that has a very good success rate with ablation. In such patients, getting rid of atrial flutter may also eliminate the need for long-term anticoagulation with strong blood thinners.

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Atrial fibrillation is a condition that is most commonly considered for ablation. Unfortunately, also this condition has the highest risk and the least success. Patients often require at least two ablation procedures and with that, there is only a 70-75% success rate in preventing recurrence. In most cases, the frequency of atrial fibrillation and the duration will be diminished. Since the ablation occurs on the left side of the heart, there is a risk for damaging the pulmonary veins and the esophagus. The procedure should only be performed in centers that are well experienced and have on-site cardiac surgery backup. It is also important to understand that ablation for atrial fibrillation will not eliminate the need for staying on blood thinners. That would require a second procedure using a specialized plug called the WATCHMAN device. Ablations for atrial fibrillation also do not prolong survival and only alleviate symptoms and therefore should not be considered if you have atrial fibrillation that is being well tolerated on medications.

Of course, the best guide to determine the need for ablation is to have a good discussion with your primary cardiologist and have an initial consultation with an electrophysiologist!

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