Treating persistent PVCs

Using radiofrequency catheter ablation to treat premature ventricular complexes



What are premature ventricular complexes (PVCs)?

PVCs are extra heartbeats originating from the ventricles (lower chambers of the heart), and often cause palpitations or other related symptoms. Many patients with PVCs have underlying structural heart disease due to coronary artery disease or congestive heart failure. However, when patients have these arrhythmias despite structurally normal hearts, the PVCs are termed "idiopathic PVCs," and are generally considered benign. However, there is growing evidence that a high burden of PVCs (more than 10 percent of all heartbeats) can cause a reduction in left ventricular ejection fraction and lead to congestive heart failure.



A word from the author

We are pleased to share that the OHSU Knight Cardiovascular Institute is offering radiofrequency catheter ablation to address PVCs in our advanced cardiac electrophysiology lab.

Radiofrequency catheter ablation is a treatment option for PVCs in patients for whom medication is ineffective or causes side-effects. This minimally invasive procedure may be particularly beneficial for patients with a high burden of PVCs, who are at greater risk for congestive heart failure.

If you have any questions or would like to consult with our team, please call **800-245-6478**.

Sincerely

Babak Nazer, M.D., Assistant professor, medicine and biomedical engineering OHSU Knight Cardiovascular Institute





What testing is necessary for patients with PVCs?

First, it is important to exclude underlying structural heart disease with an echocardiogram. Another common test for patients with PVCs is a 24- or 48-hour Holter monitor, or 2-week ZIO® patch monitor, which helps to determine PVC frequency, the number of PVC morphologies, and correlation of PVC with patient symptoms.

What treatments are available for PVCs?

Options include medical management and catheter ablation. Medical management usually consists of oral beta-blockers and/or antiarrhythmic medications that are taken once or twice daily. In patients who do not tolerate medications or who continue to have arrhythmia despite medications, catheter ablation can be performed in the electrophysiology lab. This is a minimally invasive procedure where catheters are passed up to the heart through the blood vessels in the groins. Using a combination of technologies, we are able to map the PVC to its source. We then eliminate the abnormal tissue causing the PVC with radiofrequency ablation from a catheter tip. Patients must lie flat for a few hours after the procedure, but usually go home the same day. In rare cases, patients may be released the next morning.

Which patients benefit from specialized PVC care?

Consider referral for specialized electrophysiology care when a patient presents with any of the following conditions:

- Palpitations concurrent with PVCs
- A high burden of PVCs (>10 percent of all heartbeats, which increases the risk for congestive heart failure)
- Monomorphic PVCs (meaning all of the same morphology on ECG)

Consults and referrals

If you have a patient who may benefit from this treatment, or to consult with our team, please call **800-245-6478.**

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