







# How to deal with complications during electrophysiology procedures?

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Complications during electrophysiological procedures, such as electrophysiological studies or ablations, although relatively rare, may occur. Some potential complications during electrophysiological procedures that one may encounter include arrhythmias, pericardial effusion, cardiac tamponade or perforation, vascular damage, neurologic complications, injection site bleeding, phrenic nerve palsy, myocardial infarction, and anesthesia-related complications. Early recognition of these complications and rapid response are key to their proper management and ensuring patient safety. Any complication during electrophysiological procedures requires an individualized approach. Medical staff and physicians are trained to recognize and treat acute complications to ensure patient safety and well-being. It is important to remain calm and work with the team of professionals to achieve the best possible outcomes for the patient.<sup>1-3</sup>

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## LITERATURE

1. Rottner L, Reissmann B, Schleberger R, Sinning C, Metzner A, Rillig A. Komplikationsmanagement im elektrophysiologischen Labor [Management of acute complications during electrophysiological procedures]. *Herzschrittmacherther Elektrophysiol.* 2020 Dec;31(4):381-387. German. <https://doi.org/10.1007/s00399-020-00698-4>
2. Sawan N, Eitel C, Thiele H, Tilz R. Ablation supraventrikulärer Tachykardien : Komplikationen und Notfälle [Ablation of supraventricular tachycardias : Complications and emergencies]. *Herzschrittmacherther Elektrophysiol.* 2016 Jun;27(2):143-50. German. <https://doi.org/10.1007/s00399-016-0422-x>
3. Abdur Rehman K, Wazni OM, Barakat AF, Saliba WI, Shah S, Tarakji KG, et al. Life-Threatening Complications of Atrial Fibrillation Ablation: 16-Year Experience in a Large Prospective Tertiary Care Cohort. *JACC Clin Electrophysiol.* 2019 Mar;5(3):284-291. <https://doi.org/10.1016/j.jacep.2018.11.013>