

## **Explantation of permanent pacemakers**

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Explantation of a permanent pacemaker is a complex procedure that requires careful multidisciplinary planning to minimize complications and ensure patient safety. Indications for device removal include infection at the pocket site, systemic infection such as endocarditis, lead malfunction, device recall, or erosion of the device through the skin¹. Pre-procedural preparation involves thorough clinical and laboratory evaluation, optimization of anticoagulant and antiplatelet therapy, and exclusion of uncontrolled infections. Patients must be adequately informed and provide written consent, while preoperative measures typically include pre-procedural fasting, hair removal at the surgical site, and the establishment of reliable intravenous access. Strict aseptic conditions and perioperative antibiotic prophylaxis are essential to reduce the risk of reinfection. Depending on the complexity of the case, explantation may be performed via simple pocket revision, transvenous lead extraction, or surgical removal.

Nursing care plays a key role in patient education, psychological support, intraoperative monitoring, and coordination of postoperative care, including wound management and follow-up. Standardized protocols based on international guidelines improve procedural success rates, reduce morbidity, and contribute to improved long-term patient outcomes.

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Döring M, Richter S, Hindricks G. The Diagnosis and Treatment of Pacemaker-Associated Infection. Dtsch Arztebl Int. 2018 Jun 29;115(26):445-452. https://doi.org/10.3238/arztebl.2018.0445