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# Specific aspects of postoperative care in a patient with opioid dependence following surgical treatment of tricuspid valve endocarditis: a case report

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**Introduction:** Infective endocarditis is a complex infection of the endocardium, most commonly involving the heart valves, and requires prolonged antimicrobial treatment and a multidisciplinary approach.[1] In patients with opioid dependence, treatment may be further complicated by withdrawal symptoms, pain management, difficult venous access, and psychological burden.[2,3] Nurses play an important role in the timely recognition of withdrawal symptoms and indistinguishing them from pain, infection, and other postoperative complications.[3]

**Case report:** 39-year-old man with long-standing dependence on opioids and other psychoactive substances, receiving methadone substitution therapy, was transferred to the Intensive Care Unit After cardiac surgical replacement of the tricuspid valve with a mechanical prosthesis due to infective endocarditis, for continuation of intravenous antimicrobial therapy and postoperative monitoring. On the second postoperative day, he developed complete atrioventricular block and became dependent on temporary cardiac pacing, after which a permanent pacemaker was implanted and connected to previously placed epicardial leads. Due to long-term intravenous psychoactive substance use, venous access and invasive procedures were considerably more difficult. During treatment, the patient developed symptoms of opioid withdrawal, requiring adjustment of the approach and closer monitoring of both his psychological and physical condition. Nursing care included systematic monitoring of vital signs, cardiac rhythm, pain, signs of infection and withdrawal, safe administration of prescribed therapy, communication, empathy, and building a relationship of trust. A psychiatrist and psychologist were included in the multidisciplinary care, and psychopharmacological therapy was adjusted according to the patient's clinical condition.

**Conclusion:** Postoperative care of a patient with opioid dependence following surgical treatment of infective endocarditis requires an individualized, multidisciplinary, and non-stigmatizing approach. Timely recognition of withdrawal symptoms and their differentiation from pain, infection, and other postoperative complications are essential for patient safety. Continuous monitoring, effective communication, psychological support, and close cooperation between nurses, physicians, and mental health professionals are important components of successful care.

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## LITERATURE

1. Byrne RA, Rossello X, Coughlan JJ, Barbato E, Berry C, Chieffo A, et al. 2023 ESC Guidelines for the management of endocarditis. Eur Heart J. 2023;44(39):3948-4042. https://doi.org/10.1093/eurheartj/ehad191
2. Wurcel AG, Suzuki J, Schranz AJ, Eaton EF, Cortes-Penfield N, Baddour LM. Strategies to Improve Patient-Centered Care for Drug Use-Associated Infective Endocarditis: JACC Focus Seminar 2/4. J Am Coll Cardiol. 2024 Apr 9;83(14):1338-1347. https://doi.org/10.1016/j.jacc.2024.01.034
3. Calcaterra SL, Martin M, Bottner R, Englander H, Weinstein Z, Weimer MB, et al. Management of opioid use disorder and associated conditions among hospitalized adults: A Consensus Statement from the Society of Hospital Medicine. J Hosp Med. 2022 Sep;17(9):744-756. https://doi.org/10.1002/jhm.12893