

The role of the nurse in patients with pericardial effusion due to the implantation of an electrical heart stimulator: a case report

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Introduction: Cardiac tamponade means a condition in which there is an accumulation of pericardial effusion and equalization of the pressure in the heart cavities with the intrapericardial pressure. This leads to a significant decrease in filling the heart with blood with a low stroke volume and a reduced blood supply to the entire organism. Pericardial effusion most often occurs because of infections, aortic dissection, trauma, post-irradiation, and as a complication of invasive cardiology procedures or the use of certain medications. Treatment of cardiac tamponade includes urgent pericardiocentesis with drainage. Pericardiocentesis is a procedure to remove accumulated fluid in the pericardial space. 1-4

Case report: We present the case of a 66-year-old female patient with a clinical picture of cardiogenic shock caused by an acute inferoposterior myocardial infarction with ST-segment elevation. After percutaneous coronary intervention with implantation of drug-eluting stent, the patient had bradycardia and hypotension, and after the prescribed therapy the complaints persist, a temporary cardiac pacemaker was placed. During monitoring, only occasional pacemaker stimulation is visual on ECG, and the electrode is removed, and the insertion site repaired. After 10 minutes, the patient becomes restless, hypotensive with bradycardia, and loses consciousness. An emergency pericardiocentesis is performed under ultrasound control, 250 ml of blood is evacuated, which is then autotransfused through a peripheral vein, after which the patient regains consciousness, vital signs are stable, and a coagulum is observed by ultrasound of the heart at the probable site of perforation the right ventricle.

Conclusion: Medical care of a patient with cardiac tamponade is carried out in the coronary unit. When performing pericardiocentesis, a nurse plays a major role, who with her expertise participates in the preparation of the patient, the preparation of accessories, the supervision of hemodynamic monitoring, and thus ensures the smooth course of the procedure and the success of the intervention, which is described in this paper.

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