

NURSE IN THE TEAM PERFORMING EPICARDIAL ABLATION

Cardiac arrhythmias are very significant cardiovascular disease. Despite the great progress in diagnosis and treatment, there is still a news headline on the front pages of the newspaper that some athletes have moved on to the field. Diagnosis and treatment of arrhythmia is a branch of cardiology - electrophysiology. Using various invasive and noninvasive tests, it precisely determines the type and origin of arrhythmia. Treatment consists of a medication therapy and in recent times, the definite treatment method is a radiofrequency ablation of an arrhythmogenic focal point. This is achieved in two ways: endocardial - when the focal point is inside the heart cavities and epicardial - when the focal point is located on the outside of the heart. Responsibility for taking care of patients with these disorders is transferred to almost every area of nursing practice. The gap in the field of electrophysiology is one of the fastest growing fields and changes with constant increase in new diagnostic tests, new medications and treatment methods with all the more sophisticated equipment. That's why nurses face a constant challenge to keep up with the latest achievements. Teams need to be formed due to the needs of the patient and to see his complete condition. They are made up of professionals from various profiles: doctors, nurses, rent engineers, computer engineers, etc. All team members have certain tasks and goals within their competence. Team work improves quality of work, patients and their families are more satisfied and stress is reduced team members. The nurse is, in addition to a doctor, the most important member of the team. In order to be able to participate more effectively in team work, it is necessary to have knowledge of the emergence of rhythmic pressures, the normal appearance of ECG as well as to recognize the occurrence and type of arrhythmias. You need to know how epicardial ablation is being performed and what complications may occur to detect the first symptoms at the time and thus contribute to better and better treatment. It is unnecessary to know the apparatus with which it is being operated and to know at any time that it is in use. Arrhythmias can cause various illnesses like stress, alcohol and caffeine consumption, smoking, alcohol, diet pills, coughs, anemia, diaphragmatic hernias etc. There is no relationship between pain and arrhythmia, some people with very common arrhythmias have no symptoms, while harmless arrhythmia in some patients causes unpleasant symptoms. The most frequent symptoms of a doctor's case are: rapid heartbeat (tachycardia), chest strain, stenocardia (pressure and chest pain), sleepiness, dyspnea, dizziness, weakness, syncope (loss of consciousness). The basis for

diagnosis is detailing the data on symptoms and physical examination, which includes ECG and laboratory analysis. Often necessary review is supplemented by echocardiographic examination, holometric monitoring, ergometric test, and exercise test. Some patients also require invasive electrophysiological diagnostic testing.

Electrocardiogram - ECG - Represents electrical potentials as a reflection of the electrical activity of the heart using electrodes placed on the surface of the body. In everyday practice, 12 drains are recorded: 3 standard or bipolar marked with Roman numerals I, II, III; 3 unipolar drains marking aVR, aVL, aVF; and 6 precordial drains that mark V1-V6. The record is done on a millimeter paper and the usual paper speed is 25 mm per second. When recording ECGs, technical drawbacks may occur due to parasitic current from the city network, electrodes replacement, tremor or disturbance of the patient. The sister's duty is to perform ECG precision, write down the name and surname of the patient and show it to the doctor for further interpretation.

Holter monitoring - Represents a diagnostic method that has a wide application in practice. It is used to detect cardiac arrhythmias and pulmonary disorders. During a continuous ECG recording the patient has fixed the electrodes on the chest strap connected to the recorder that includes a magnetic strip or a memory card in which the data is recorded and the battery. Before starting the recording, it is necessary to place the electrodes properly and carefully pry them for the skin and calibrate the device. After 24 hours of recording, reading of the record is performed using computer programs. During the recording, the patient keeps a diary about activities and possible subjective difficulties such as dyspnea, heartburn, angina pain, dizziness, vomiting, syncope. During the reading of the records, ECG changes with subjective disorders are compared.

Ergonomics - Represents a non-invasive diagnostic method that exposes the patient to standardized and reliant loads. It's happening on a bicycle ergometer or a moving belt and the load is steadily and progressively. This test determines the achieved load, heart rate, blood pressure, and ECG changes during and after the load. The ECG is continuously monitored on the monitor during and after the load, and is recorded at the beginning of the test, every first and third minutes of each load step and after the load. The test is interrupted when the given load is reached or in case of angina pain, ST depression, hypertension, appearance of polymorphic extrasists, ventricular tachycardia, frequency decline and hypotension.

Echocardiography - Represents a diagnostic method that uses ultrasonic signals that are reflected from the heart's structures and create an image of the monitor on anatomic relationships, morphological and functional changes. It is

very important in the preparation of patients for future epicardia ablation, heart rate monitor and control of pericardial discharge after completion of the procedure. Echocardiography is done in the ultrasound diagnostic cabinet in which a specially educed VMS is used.

Chest Scanner - Represents a radionuclide test that uses radiographs and tomography in addition to radiography, a method based on a mathematical procedure for processing images or tomographic reconstruction of images with the use of modern computers and software packages therein. The method of digital geometric processing is used to generate three-dimensional images of the inside of the recorded organ that is made up of a large series of two-dimensional x-ray images recorded during a rotation of the device around its or. Scintilla examination of the thorax may reveal various anomalies of the heart and blood vessels, precise position of the coronary arteries, specific pericardial anatomy, and the preparation of a doctor for the safety of epicardia ablation.

Electrophysiological examination - It is an invasive method in which local anesthesia enters the heartbeat through the vein into the groove and enters the heart and at certain typical locations, records the ECG in the heart. This is sometimes of great importance in order to establish a true diagnosis (there are arrhythmias where it is possible to do so only) and accurately describe the electrical composition of the heart and its anomaly. During the procedure, it is possible to cause the arrhythmia that the patient recognizes as a problem. It is an extremely safe operation with extremely rare complications. This type of examination requires hospitalization of the patient and does not fall under the routine test methods.

EPICARD ABLATION - In the absence of all previous tests, patient status and his / her wishes doctors make the best decision for further treatment. First, standard medication is proposed. The most commonly used medications for treating rhythm disorders include antiarrhythmic, beta blockers, calcium channel blockers, sedatives, etc. Those in some patients may have many unwanted effects. In some rhythm disorders, in addition to the regular use of the drugs, tachycardia attacks occur which disturb them in day-to-day work and life and require frequent hospitalization and defibrillation are candidates for invasive treatment of arrhythmia. Patients with ischemic heart disease have large endocardial scars and there is a more frequent sub endocardial site of ventricular tachycardia. In patients with non-cardiac cardiomyopathy due to dilated cardiac muscle, low-voltage fields are associated with the existence of scars, which are in most cases artillogens. The most important part of epicardia ablation is mapping using a three-way navigation system. It allows doctors to see a realistic picture of all chambers and predecessors as well as the exterior of the heart with all its specifics. Mapping finds the exact place in the heart where arrhythmia is formed

and then through the catheter the radiofrequency energy passes. After that, the patient is spotted. Although this acts as a very easy and simple intervention, ablation takes a few hours. Movement of catheter at heart is monitored all the time with the help of an X-ray. The catheter reaches the place where our previous studies indicate as a source of arrhythmia and there are measures of electric potential. This finding locations lasts a long time, requires millimeter precision and the great patience of the doctor conducting the procedure. Mapping and ablation of arrhythmogenic focal points is traditionally done by endocardial (introducing an ablation catheter through the blood vessels) approach. However, in some patients the tachycardia focal point was deep in endocardia, and in some even sub-epicardia. Such focuses cannot be accessed and ablated by endocardial approach, thus eliminating arrhythmia. Epicardial approaches also occur in patients with no endocardial ablation abnormalities, i.e. arrhythmia did not cease.

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