

## EVALUATION OF THE EFFECTIVENESS OF CPAP THERAPY IN PATIENTS WITH CARDIOGENIC PULMONARY EDEMA

**Quchqarova F.X.**

Anesthesiology-resuscitation direction 3 stage master  
Department of anesthesiology-resuscitation  
Andijan State Medical Institute

**Relevance.** Tracheal intubation and artificial lung ventilation (ventilator) are standard procedures in the management of patients with ODN. However, these manipulations are invasive and involve the development of barotrauma, mechanical and infectious complications.

Modern technical capabilities make it possible to optimize respiratory support, excluding the use of endotracheal or tracheostomy tubes. This method is known as noninvasive ventilation (NVL).

The first reports on the use of mask CPAP therapy in the treatment of pulmonary edema appeared in the 30s of the 20th century. Over the past few years, a large number of studies have been carried out on the role of LVL in cardiogenic pulmonary edema. According to the results of meta-analyses, the use of respiratory support in this emergency condition significantly reduces the need for ventilation, reduces the "work of breathing", restores gas exchange.

However, only a small number of ongoing studies have been devoted to the study of non-invasive respiratory support in patients with acute myocardial infarction.

Percutaneous noninvasive respiratory support (CPAP therapy) significantly expands the arsenal of methods of treatment of patients with acute pulmonary edema against the background of cardiogenic pulmonary edema, however, the issue of modes, timing and algorithms of its implementation remains relevant.

The lack of clear criteria for the implementation of CPAP therapy in this category of patients has determined the need for further research in this direction.

**The purpose of the study.** To study the effect of CPAP therapy on respiratory failure and hemodynamic disorders in AMI patients with cardiogenic pulmonary edema and to evaluate the effectiveness of non-invasive respiratory support in the complex treatment of the identified pathological condition.

**Materials and methods of research.** The study was published in 2021-2023 by 60 patients were studied from the Departments of the clinic of the Andijan State Medical Institute named after Yu.Otavekov.

**Research results.** Patients underwent drug therapy, including morphine hydrochloride, furosemide ( $100.71 \pm 17.34$  mg /day) with normovolemia and hypervolemia, nitroglycerin ( $17.11 \pm 2.12$  mcg /min), the individual dose was titrated according to blood pressure, heparin (20 thousand units /day), aspirin (250 mg/day), dopamine ( $7.13 \pm 1.27$  mcg /kg/min) Oxygen therapy was performed using masks under the control of SaO<sub>2</sub> (SaO<sub>2</sub> > 90%) and the gas composition of arterial blood.

After 30 minutes (0 point) of drug and oxygen therapy, the main clinical indicators (severity of shortness of breath, blood pressure, heart rate, BDD, SaO<sub>2</sub>) were re-evaluated. An increase in three of the five indicators was considered a response to the therapy As a result, patients at 30 minutes (0 point) were divided into two groups group A (patients who responded positively for the recommended therapy) and the group. B (patients who did not respond well to the recommended treatment of COL) Further therapy of group B patients was combined with CPAP therapy.

CPAP therapy was performed using REM-Star devices (Respironics, USA) and Ultra Mirage face masks (ResMed, Australia) with the creation of constant positive pressure in the respiratory tract (CPAP =  $7.3 \pm 1.2$  cm of water ct), the pressure level was selected individually, under the control of the clinical condition and oxygen status of the patient, the mask contour was fed oxygen to achieve  $SaO_2 > 90\%$ .

**Conclusions.** 1. CPAP therapy in patients with cardiogenic pulmonary edema has a significant positive effect on central hemodynamic parameters, as evidenced by a significant decrease in jamming pressure, average pressure in the pulmonary artery, an increase in the cardiac index, work index and left ventricular ejection fraction  
2. A reflection of the high effectiveness of respiratory support in the complex therapy of cardiogenic pulmonary edema is a significant decrease in the concentration of the marker of "stretching" of the left ventricle (BNP). The safety of the method is confirmed by the absence of the effect of CPAP therapy on biochemical markers of myocardial necrosis (CFK, MV-CFK).