

# Sestrinske intervencije u zbrinjavanju bolesnika sa akutnim infarktom miokarda

## Nursing Interventions in the Care of Patients with Acute Myocardial Infarction

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### Apstrakt

Akutni infarkt miokarda (AIM) je česta i urgentna bolest sa potencijalno lošom prognozom. Nastaje zbog naglog prekida protoka krvi kroz krvne sudove srca. Razlog prekida cirkulacije je začepljenje krvnih sudova masnim naslagama i sitnim krvnim ugrušcima – trombima. Zbog prekida protoka krvi, srčani mišić počinje delimično da odumire, nastaje smanjenje zdrave srčane mišićne mase, i srce gubi delom svoju osnovnu funkciju.

AIM se dešava u bilo koje vreme i na svakom mestu, najčešće u radnom životnom dobu (40–60 god.) i ima, ne samo medicinski, već i socijalni značaj. Dijagnoza AIM postavlja se na osnovu karakterističnih promena u kliničkoj slici, elektrokardiograma i biohemijskih analiza.

U tipičnoj kliničkoj slici dominiraju anamnestički podaci o anginoznom bolu i objektivni nalaz anginoznog statusa:

- bol koji traje duže od 30 min,
- na skali od 0 do 10 mnogi ga ocenjuju sa 10,
- lokalizovan je iza grudne kosti i/ili epigastrijuma, širi se u vrat ili duž leve ruke,
- bol je često u vidu pritiska, stezanja, probadanja.

Često je prisutno i znojenje, malaksalost, mučnina, povraćanje.

Pravovremenim prepoznavanjem simptoma AIM i pozivom hitne medicinske pomoći (HMP) može se reći da počinje zbrinjavanje obolelog. Ekipu HMP čine 1 lekar (specijalista urgentne medicine), 1 medicinska sestra / tehničar i 1 vozač, tako mali broj osoba, ali sa takvim znanjem, profesionalizmom, predanošću, koji su spremni da u svakoj situaciji daju maksimum. Sva sanitetska vozila treba da budu opremljena monitoring sistemom, defibrilatorom, sistemima za oksigeno terapiju, endotrahealnu intubaciju, infuzionim rastvorima i adekvatnim lekovima.

Prva pomoć bolesniku sa AIM na terenu, u kojoj medicinska sestra / tehničar ima značajnu ulogu, sastoji se od: adekvatnog položaja, oksigeno terapije, EKG monitoringa, uspostavljanja venske linije, aplikacije terapije i psihičke podrške. Transport bolesnika treba biti brz, efikasan, siguran. Ekipa HMP telefonskim putem obavestava prijemnu ambulantu o prijemu, a ekipa iz prijemne koronarnu jedinicu i salu za kateterizaciju.

Pacijent se smešta u koronarnu jedinicu.

### Abstract

Acute myocardial infarction (AMI) is a frequent and urgent disease with a potentially poor prognosis. It is caused by a sudden interruption of blood flow through the blood vessels of the heart. The reason for the interruption of circulation is the clogging of blood vessels with fatty deposits and tiny blood clots - thrombi. Due to the interruption of blood flow, the heart muscle begins to partially die, a decrease in healthy heart muscle mass occurs, and the heart loses part of its basic function.

AMI occurs at any time and in any place, most often the working age (40-60 years), and has not only medical but also social significance. The diagnosis of AMI is made on the basis of characteristic changes in the clinical picture, electrocardiogram, and biochemical analyses.

The typical clinical picture is dominated by anamnestic data on anginal pain and an objective finding of anginal status:

- pain that lasts longer than 30 minutes,
- on a scale from 0 to 10, many can rate it as a 10,
- it is localized behind the sternum and/or epigastrium, spreads to the neck or along the left arm,
- pain is often in the form of pressure, tightness, and stabbing.

Sweating, weakness, nausea, and vomiting are also often present.

With the timely recognition of the symptoms of AMI and the call of the emergency medical service (HMP), it can be said that the treatment of the patient begins. The HMP team consists of 1 doctor (specialist in emergency medicine), 1 nurse/technician, and 1 driver, such a small number of people, but with such knowledge, professionalism, and dedication, who are ready to give their best in every situation. All medical vehicles should be equipped with a monitoring system, a defibrillator, systems for oxygen therapy, endotracheal intubation, infusion solutions, and adequate medicines.

First aid to a patient with AMI in the field, in which the nurse/technician plays a significant role, consists of adequate positioning, oxygen therapy, ECG monitoring, the establishment of a venous line, application of therapy, and psychological support. Patient transport should be fast, efficient, and safe. The HMP team informs the reception clinic about the admission by telephone, and the reception team informs the coronary unit and the catheterization room.

The patient is placed in the coronary unit.

Sestrinske intervencije su:

- smeštaj bolesnika u postelju i oslobađanje pacijenta odeće,
- primena oksigeno terapije,
- provera prohodnosti plasiranih braunila,
- uzimanje krvi za laboratorijske analize,
- aplikacija propisane terapije,
- spovođenje zdravstvene nege prema stanju i potrebama bolesnika,
- priprema za dijagnostičko-terapijske procedure.

AIM se može lečiti:

1. *Primarnom koronarnom intervencijom* (primary percutaneous coronary intervention-PCI) – invazivna metoda lečenja.

Sestrinske intervencije podrazumevaju obezbeđivanje dva venska puta, vađenje krvi za krvnu grupu i Rh faktor, aplikaciju ordinirane terapije, informisanje pacijenta o proceduri i davanje obazaca za saglasnost za intervenciju – potpis pacijenta, brijanje prepona ili ruku (mesto punkcije). Nakon pripreme, pacijent se odvozi u salu za kateterizaciju.

Zdravstvena nega nakon završene koronarografije ili PCI:

- kontrola vitalnih parametara i EKG-a,
- pacijent treba da popije 1,5 l tečnosti za 2–3 sata da bi eliminisao kontrast iz organizma,
- kontrola diureze,
- kontrola punkcionog mesta.

2. *Primenom fibrinolitičke terapije* – neinvazivna metoda lečenja.

Sestrinske intervencije u toku primene fibrinolitičke terapije su stalni nadzor nad pacijentom, EKG monitoring, stalno merenje vitalnih parametara, oksigeno terapija, brzo i adekvatno reagovanje u slučaju komplikacija.

Medicinske sestre / tehničari su izuzetno jake sponje koje povezuju ceo sistem zdravstvene nege, od prijema do otpusta.

Nursing interventions are:

- placing the patient in bed and undressing the patient,
- application of oxygen therapy,
- checking if a placed cannula is passable,
- taking blood for laboratory analyses,
- application of prescribed therapy,
- providing health care according to the condition and needs of the patient,
- preparation for diagnostic and therapeutic procedures.

AMI can be treated by:

1. *Primary coronary intervention* (primary percutaneous coronary intervention-PCI) – an invasive method of treatment.

Nursing interventions include providing two venous accesses, drawing blood for blood group and Rh factor, applying the prescribed therapy, informing the patient about the procedure, and providing consent forms for the intervention - the patient's signature, shaving the groin or hands (puncture site). After preparation, the patient is taken to the catheterization room.

Health care after completed coronary angiography or PCI:

- control of vital parameters and ECG,
- the patient should drink 1.5 l of liquid in 2-3 hours to eliminate the contrast from the body,
- diuresis control,
- control of the puncture site.

2. *Using fibrinolytic therapy* - a non-invasive method of treatment.

Nursing interventions during the application of fibrinolytic therapy are constant supervision of the patient, ECG monitoring, constant measurement of vital parameters, oxygen therapy, and quick and adequate response in case of complications.

Nurses/technicians are extremely strong links that connect the entire healthcare system, from admission to discharge.