Acute Myocardial Infarction

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ABSTRACT

The article describes practical cases of unrecognized acute myocardial infarction, which debuted in a man at 24 years old and woman 60 years old, with a different syndrome with an ST-segment elevation with an outcome in anterior transmural myocardial infarction (MI) wall of the left ventricle. The diagnosis and treatment of MI with the justification of medical appointments are described. The emergence of MI at a young age encourages cardiologists to search for new links in the pathogenesis of this pathology.

Key Words: Myocardial infarction, Diagnosis, Treatment, Acute myocardial infarction, Cardiovascular disease diagnosis, Mortality.

INTRODUCTION

Intense myocardial dead tissue creates as a result of an intense infringement of bloodstream within the coronary supply route, ordinarily caused by the arrangement of a blood clot. The heart, like every other strong organ, needs a good blood supply. The coronary supply routes leave from the aorta, and after that separate into littler branches that nourish the blood to all parts of the heart muscle (myocardium)³.

In typical coronary courses, bloodstream unsettling influence, as a rule, does not happen. Be that as it may, on the off chance that there's thermos on the vessel divider (cholesterol recolor or plaque), at that point over time its external shell breaks, which begins the blood coagulation prepare with the arrangement of a blood clot. With myocardial dead tissue, the blood supply to the range of the heart muscle abruptly stops, and if it isn't rapidly reestablished, the harm will be irreversible, i.e. the term myocardial localized necrosis actually implies harmed heart muscle. After a created myocardial dead tissue, a portion of the heart muscle is supplanted by scar tissue within the few weeks.

Myocardial localized necrosis – much data has been composed and said conjointly entirety heart assault offices, recovery centers, a wide assortment of teaching, counting the

World Wellbeing Organization (WHO), have been made with the objective of avoiding, treating and restoring this malady. Be that as it may, all this does not decrease the relevance of the subject, concurring to WHO, 2/3 of passing from cardiovascular illnesses among individuals matured 45 to 65 are coronary heart disease and mainly myocardial localized necrosis. The cardiovascular malady may be a major social and epidemiological issue, both in Uzbekistan and around the world. WHO appropriately considers them a scourge of the 20th century? According to statistics, its recurrence among the male populace over the age of 40 a long time, in numerous districts of the world is from 2 to 6 per 1000 population.

Now we will see the classification of myocardial infarction

According to the stages of development:

- The most acute period (up to 6 hours from the onset of MI)
- Acute period (up to 12-14 days from the onset of MI)
- Subacute period (up to 2 months)
- Scarring period (more than 2 months)

According to the anatomy of the lesion, it is divided:

- Transmural
- Intramural
- Subendocardial
- Subepicardial

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ISSN: 2231-2196 (Print)

ISSN: 0975-5241 (Online)

Received: 18.04.2020

Revised: 30.05.2020

Accepted: 15.06.2020

Published: 22.07.2020

In terms of lesion:

- Small focal, not Q-infarction
- Localization of the focus of necrosis
- Left ventricular myocardial infarction (anterior, lateral, lower, posterior)
- Apex myocardial infarction
- Interventricular septal myocardial infarction (septal)
- Right ventricular myocardial infarction
- Combined localization: posterior-lower, anterolateral and others

With the flow:

- Monocyclic
- Lingering
- Recurrent MI (a new focus of necrosis in the basin of the same coronary artery from 72 hours to 8 weeks)
- Repeated MI (in the basin of another coronary artery, a new focus of necrosis after 28 days from the previous MI) ¹¹.

MATERIALS AND METHODS

Cutting edge strategies of treating myocardial dead tissue are related with the quick rebuilding of bloodstream through a blocked blood vessel. Typically, fundamental to anticipate or minimize harm to the heart muscle. The reality is that if the bloodstream is reestablished inside a couple of hours, most of the heart muscle that was subjected to ischemia is able to outlive. That's why critical restorative consideration is required for myocardial dead tissue, and treatment is endorsed critically: the quicker the bloodstream is reestablished, the way better the forecast of the understanding. Myocardial dead tissue is an intense condition, a clinical shape of coronary heart infection, in which rot creates as a result of total or fractional lacking of blood supply to the region of the heart muscle.

Myocardial infarction is usually classified by a number of signs:

- 1) According to the time of its occurrence (acute myocardial infarction - the duration of a heart attack from the onset of an ischemic attack to the death of 28 days or less; recurrent heart attack - a new ischemic attack more than 3 or less than 28 days after the previous one; repeated heart attack - a new ischemic attack later 28 days and later after the previous one;
- 2) By localization - in numerous elements of the heart muscle: subendocardial - subendocardial infarction, subepicardial - subepicardial infarction, its center part - intramural infarction or the whole thickness of the coronary heart muscle - transmural infarction;
- 3) In prevalence (small focal, large focal and transmural myocardial infarction);
- 4) by using degrees: prodromal period (1-18 days); acute period (up to 2 hours from the onset of a coronary heart

attack); acute period (up to ten days from the onset of a coronary heart attack); subacute period (from 10 days to 4-8 weeks); scarring period (from 4-8 weeks to six months). According to morphological features, two tiers are distinguished - necrotic and scarring stage ¹.

The following causes of myocardial infarction are distinguished:

1. Anomalies in the development of coronary arteries.
2. Embolism (by vegetation, parts of a parietal thrombus or thrombus on an artificial valve, parts of a tumor).
3. Coronaritis (stenosis, aneurysm, rupture of the artery, endothelial dysfunction).
4. Stratification of the ascending aorta with the formation of a hematoma near the mouth of the coronary artery.
5. DIC syndrome with coronary artery thrombosis (intoxication, generalized infection, hypovolemia, shock, malignant neoplasms, erythema, thrombocytosis, etc.).
6. Primary heart tumors (tumor necrosis due to vascular thrombosis, embolization of the coronary artery).
7. Germination and metastases of extracardiac tumors.
8. Spasm of coronary arteries (including due to the use of cocaine, amphetamine).
9. Mechanical injury.
10. Electrical injury.
11. Iatrogenic (coronary artery catheterization, trauma during aortic valve transplant).

In addition, predisposing risk factors are distinguished:

- smoking and passive smoking;
- arterial hypertension and other cardiovascular diseases;
- increased concentration of LDL cholesterol in the blood;
- low concentration of HDL cholesterol in the blood;
- high triglycerides in the blood;
- low level of physical activity;
- age, the older, the higher the probability;
- air pollution;
- male gender;
- obesity;
- alcoholism;
- diabetes mellitus and some other endocrine diseases;
- reception of hormonal drugs;
- myocardial infarction in the past and the manifestation of any other manifestations of atherosclerosis;
- excessive physical activity and stress;
- urbanization.

Prevention measures:

Prevention is based on maintaining a healthy lifestyle:

proper nutrition: eat foods with low fat content (dairy products-0.5-1.5%, lean meats, fish);
avoid eating foods high in fat (smoked meats, lard, may-

onnaise, margarine, fatty meats and fish, butter, etc.); fry with a minimum amount of oil or without it at all; cook food in boiled, stewed, steam, baked form; eat fresh vegetables and fruits without restriction⁷

season salads with lemon juice and vinegar, unsweetened yogurt; limit the consumption of carbohydrates, sugars to 30 g (6 teaspoons) per day, do not consume or reduce the amount of sweet compotes, carbonated drinks, confectionery products with cream and dough, chocolate, salt; physical activity - to combine active and passive rest - not to lead a sedentary lifestyle and not to overwork; engage in physical activity (exercises, exercise, physical education, walking, hiking); quit smoking and alcohol abuse; avoid stress and learn how to resist it; blood pressure control (normal values for an adult up to 140/90 mm Hg); blood sugar control (should not exceed 6 mmol / l); blood cholesterol control. control body weight

RESULTS AND DISCUSSIONS

First of all, we will see stages:

1. Ischemia
2. Damage (necrobiosis)
3. Necrosis
4. Scarring [Daminova, 2020]

To keep away from the improvement of the disease, it is important to undergo a timely examination of the cardiovascular machine and be discovered by a cardiologist observation on patients: 27 years old, a driver added to the first City Clinical Hospital in Samarkand by way of an ambulance brigade from the workplace, brought on through the advent of first-time pressing pains inside the heart region. An electrocardiogram become shot.

Preliminary diagnosis: ischemic heart disease: first-occurring angina pectoris. An ambulance team for the purpose of anesthesia under the tongue was given 1 tablet of nitroglycerin, intramuscularly (IM) Sol. Analgin 50% -4.0 + Sol.Dimedroli 1% -1.0. The pain syndrome decreased, but not stopped, compressive, pressing pains remained in the precordial region. On palpation of the chest, the pain did not change.

An electrocardiogram was repeated in the hospital's emergency room, negative dynamics: signs of Q-IM of the anterior wall of the left ventricle (LV) were recorded, the most acute period. The patient was hospitalized in the intensive care unit and intensive care unit (ICU). For the purpose of intravenous analgesia, Sol. Morphini 1% -1.0.

From the anamnesis: the affected person Anvarov fell sick acutely, pains of a comparable nature regarded for the first

time (2 hours before hospitalization within the ICU). The day earlier than, there was a psych emotional load. Of the past ailments, the best colds were mentioned. The heredity of IHD is careworn - the father died of myocardial infarction at 42 years vintage. a number of the danger elements: smokes, psycho-emotional strain at home.

Objectively: proper physique, extended nutrition (top 180cm, weight 85kg, BMI = 26.4). The skin is of regular coloration. the general circumstance is serious. The variety of breaths 18 consistent with min. Vesicular respiration is heard above the lungs, no wheezing. Heart sounds are rhythmic; I tone at the pinnacle is weakened. Heart rate (HR) a hundred and ten beats.

In minutes Blood stress (BP) one hundred twenty/eighty mm RT. artwork. The tongue is wet, moderately lined with a white coating.

The stomach is smooth, painless on palpation. The liver is not enlarged. A 40-yr-antique girl became introduced from the treatment branch that spent approximately 2 days inside the sanatorium. Anamnestic facts - smoking for a long term, kind II diabetes mellitus for 10 years. In the health center - complaints of pain within the epigastric region, inside the proper hand, severe shortness of breath, sweating, fear of dying, swelling of the legs, extreme weakness, worsening became cited for the duration of a previous couple of hours, while for no reason there has been a rapid heartbeat, shortness of breath.

The nation of mild severity, blood stress one hundred forty/90 mm RT. art., energetic function, subcutaneous tissue is overdeveloped, stomach obesity, peripheral edema of the legs, breathing charge of 25 in 1 minute, heart sounds are muffled, the rhythm is wrong, systolic murmur at the points of auscultation, heart charge of 86 according to the minute. Consulted via professionals tested: electrocardiogram without features, in the biochemical evaluation of blood expanded ALT, AST, barely accelerated glucose, general protein, cholesterol, and B-lipoproteins.

Prescribed hypotensive, hypoglycemic treatment, correction of water-electrolyte balance. On the second day of the night time, the female all of sudden died. the primary clinical prognosis is "Acute cardiovascular failure. Arterial hypertension of the III level.

A woman of extended nutrition, a bluish puffy face, pulmonary edema, said giant arteriosclerosis of the arteries, inside the posterior wall of the left ventricle three cm from the apex flabby yellowish with a reddish nimbus consciousness, the histological examination discovered the morphology of acute myocardial infarction (necrotic degree), pulmonary edema, impaired blood circulation in organs and tissues. Primarily based on the foregoing, the purpose of dying turned into established as type 2 diabetes mellitus, which became

complicated by using acute transmural myocardial infarction of the posterior wall of the left ventricle (necrotic level).

CONCLUSION

In each case, acute myocardial infarction not diagnosed on the level of inpatient care became defined, even as the person had a reasonably traditional scientific photograph of myocardial infarction, and the lady had an abnormal form (belly), but characteristic of endocrine pathology within the form of diabetes mellitus. There have been a number of predisposing factors - smoking, obesity, age, the presence of a history of pathology within the shape of arterial high blood pressure, and diabetes mellitus. Below desk-bound situations, ECG monitoring became not completed, an intensive biochemical blood test, consisting of for cardio tropic proteins MB-KFK, LDH 1, troponin, an echocardiographic examine, if important, coronagraph. However, the analysis of myocardial infarction is hard, the greater its remedy, as the records convincingly indicate²⁸.

About 15-20% of patients with myocardial infarction die at the prehospital stage, another 15% - in the hospital. Most of the hospital mortality occurs in the first two days, so the main therapeutic measures are carried out precisely during this period. Controlled trials show that restoration of perfusion during the first 4-6 myocardial infarction helps to limit its size, improve local and general contractility of the left ventricle, reduce the frequency of hospital complications (heart failure, pulmonary embolism, arrhythmias, cardiogenic shock, rupture of the heart muscle) and, accordingly, mortality. The restoration of perfusion during the first 1-2 hours of myocardial infarction is particularly favorable. Late restoration of perfusion is also accompanied by an increase in survival, which is associated with an improvement in myocardial healing and a decrease in the frequency of arrhythmias (but not a limitation of the size of myocardial infarction).

Acknowledgement: none

Conflict of interest: none

Financial support: none

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