Case Report

EXTENSIVE MI WITH AGITATION IN A PATIENT

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ABSTRACT:

A 30 years old male admitted to the emergency department our hospital in Yazd, Iran in January 2014. He was very agitated and did not cooperate with us. On admission vital sign were as follows: blood pressure of 160/110mmhg without significant postural change, a regular pulse of 85 beats per minute a respiratory rate of 15/min a core temperature of 36.8 c and an o2 saturation of 96% and bedside glucometer was 114mg/dl, VBG was normal but ECG and cardiac monitoring was not performed because the patient was very agitated.

INTRODUCTION:

Myocardial infarction (MI; Latin: *infarctus myocardii*) or acute myocardial infarction (AMI), commonly known as a heart attack, occurs when blood stops flowing properly to a part of the heart, and the heart muscle is injured because it is not receiving enough oxygen [1]. Usually, this is because one of the coronary arteries that supplies blood to the heart develops a blockage due to an unstable buildup of white blood cells, cholesterol and fat. The event is called "acute" if it is sudden and serious [2]. Myocardial infarction differs from cardiac arrest, although cardiac arrest can be a consequence of MI [2].

A person having an acute MI usually has sudden chest pain that is felt behind the sternum and sometimes travels to the left arm or the left side of the neck [3]. Additionally, the person may have shortness of breath, sweating, nausea, vomiting, abnormal heartbeats, and anxiety. Women experience fewer of these symptoms than men, but usually have shortness of breath, weakness, a feeling of indigestion, and fatigue. In many cases, in some estimates as high as 64%, the person does not have chest pain or has vague symptoms [4]. These are called "silent" myocardial infarctions [4].

Important risks are previous cardiovascular disease, old age, tobacco smoking, abnormal blood levels of certain lipids, diabetes, high blood pressure, lack of physical activity, obesity, chronic kidney disease, excessive alcohol consumption, and the use of cocaine and amphetamines [5]. The main ways to determine if a person has had a myocardial infarction are electrocardiograms (ECGs) that trace the electrical signals in the heart and testing the blood for substances associated with damage to the heart muscle [5]. ECG testing is used to differentiate between two types of myocardial infarction based on the appearance of the tracing. An ST section of the tracing higher than the baseline is called an ST elevation MI (STEMI) which usually requires more aggressive treatment [5]. If this is not the case, the diagnosis is confirmed with a blood test (usually troponin).

Immediate treatments for a suspected MI often include aspirin, which prevents further blood from clotting; nitroglycerin, sometimes given to treat chest pain; and oxygen. STEMI is treated by restoring circulation to the heart, called reperfusion therapy, and typical

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methods are angioplasty, where the arteries are pushed open, and thrombolysis, where the blockage is removed using medications. Non-ST elevation myocardial infarction (NSTEMI) may be managed with medication, although angioplasty may be required if the person is considered to be at high risk [5-7]. People who have multiple blockages of their coronary arteries, particularly if they also have diabetes, may also be treated with bypass surgery (CABG).

CASE PRESENTATION:

A 30 years old male admitted to the emergency department our hospital in Yazd, Iran in January 2014. He was very agitated and did not cooperate with us. On admission vital sign were as follows: blood pressure of 160/110mmhg without significant postural change, a regular pulse of 85 beats per minute a respiratory rate of 15/min a core temperature of 36.8 c and an o2 saturation of 96% and bedside glucometer was 114mg/dl, VBG was normal but ECG and cardiac monitoring was not performed because the patient was very agitated.

According to statement of his father and brother there was no past medical history included diabetic mellitus, hyper tension, hyperlipidemia and ischemic heart disease and etc. They denied addiction and consumption of alcohol and medication such as amphetamine. 700mg thiopental sodium, 20 mg diazepam, 5 mg haloperidol and 5 mg midazolam were injected to him but he didn't sedate. Then fentanyl 100microgram was injected that the patient was sedate for short time and ECG was performed. The ECG revealed massive MI (Figure 1& 2).

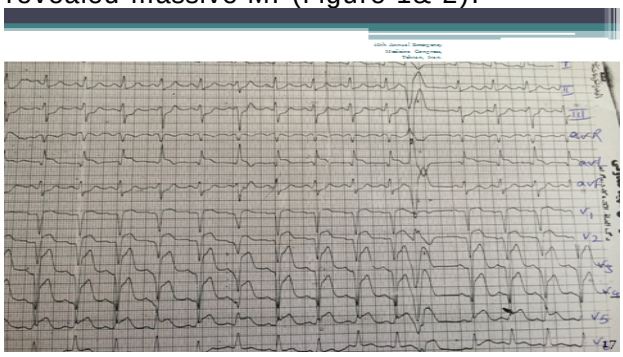

Fig.1. ECG of stage 1

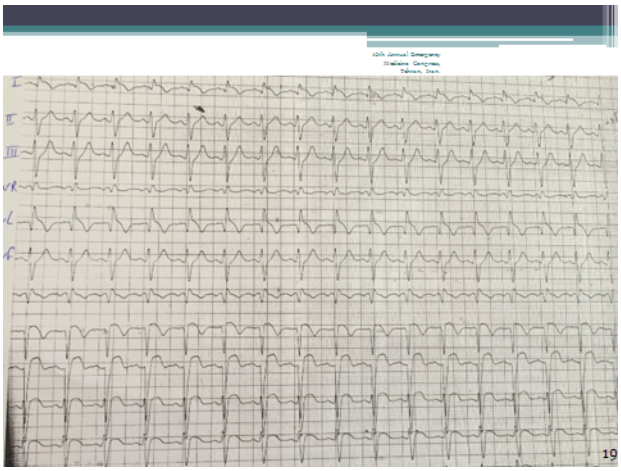

Fig.2. ECG of stage 2

The patient was taken to catch lab he underwent coronary angiography which showed totally cut off at proximal of left anterior descending artery, bed side echocardiography showed left ventricular ejection fraction of 40%. He was treated with deploying metal stent. He was discharged on day 7 of hospitalization in the coronary care unit (CCU) in a stable condition.

DISCUSSION:

After an MI, there often is a progression of coronary artery disease, including reinfection and congestive heart failure, within the first 6 months [1]. Minimizing complications after MI is a goal of nursing; patient performance of self-care behaviors aids in attaining these health outcomes. Self-care has been linked to depressive symptoms and recovery after a cardiac event with depressive symptoms impacting morbidity and suicidality [4]. Important risks are previous cardiovascular disease, old age, tobacco smoking, abnormal blood levels of certain lipids, diabetes, high blood pressure, lack of physical activity, obesity, chronic kidney disease, excessive alcohol consumption, and the use of cocaine and amphetamines [5-7]. According above demonstration of MI is chest pain, nausea vomiting, sweating, dyspnea, and in old age, usually have history of DM, HTN, IHD, and HLP. In this case, the patient was young 30 y/o with sever agitation without past

medical history and had extensive MI. demonstration of MI in this case was atypic.

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1	Dr. Alireza Esmaeili	Principal investigator and overall supervision of project took part in interpretation of data
2	Dr. Mohammad Ali jafari	Co-Investigator, helped in drafting the article & revising it critically
3	Seyed Hossein Shah cheraghi Marziyeh Ghilian	Took part in completion, analysis & interpretation of data

TAKE WARNING! HE HAS NOT EXPOSED SO MANY OF YOUR SINFUL ACTIVITIES THAT IT APPEARS AS IF HE HAS FORGIVEN YOU (IT MAY BE THAT HE HAS GIVEN YOU TIME TO REPENT).

Hazrat Ali (Karmulha Wajhay)