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Odd Presentation of MI in A Younge Woman

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Abstract

Myocardial infarction is manifested by various manifestations. Chest pain is the most common manifestation of it. But in rare cases there is a strange demonstration and myocardial infarction, especially in patients with risk factors for cardiac disease must be considered. We report a case of a 34-year-old woman who come to hospital with epigastric pain, loss of consciousness and jerky motion. After supplementary studies ectopic pregnancy and myocardial infarction were diagnosed. Although the age and the symptom of the patient was not suitable for myocardial infarction, but because of the existence of cardiac risk factors Considering cardiac issues seems to be important.

Keywords:
myocardial infarction; ectopic pregnancy; epigastric pain

Introduction

Chest pain caused by Myocardial infarction is the most common causes of patient visiting emergency departments (Beyranvand, Piranfar, Mobini, & Pishgahi, 2017) (1). symptoms of heart attack in women include: usual fatigue lasting for several days or sudden sever fatigue, sleep disturbance, anxiety, light head ness, shortness of breath, indigestion or gas like pain, upper back shoulder or throat pain, jaw pain or pain that spreads up to her jaw, pressure or pain in the center of her chest which may spread to her arms. (Sullivan, 2016). the most common symptoms women experience during a heart attack are: pain or discomfort in one or both arms, the back, neck, jaw or stomach. shortness of breath, with or without chest pain other signs such as breaking out in a cold sweat, nausea or light head ness. young and middle age women do not always experience chest pain (Chest pain not felt during most heart attacks, 2017).

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Case:

A 34 years old women had come to a day clinic with aggravation epigastric pain. she was treated by cocktail of: Aluminum-mgs, Ranitidine and lidocaine and she under gone serum therapy for 20 minute in clinic. During follow up the patient had loss of consciousness with general jerky motion suddenly. After rapid monitoring ventricular fibrillation was found and CPR began and was in tubed and chest compression and was used D/C shock. After 10 minute she had sinus tachycardia and she was sent with EMS to emergency center (shohaday e tajrish hospital). she was admitted in ICU while she had GCS =3/10 and jerky motion. After detailed history, she had recurrent epigastric pain for two weeks and she was recurrently treated with proton pump inhibitor and Aluminum mgs. During two last weeks she had moderate to severe epigastric pain.

History:

she was nurse who was married for 5 years and was nullipar and in past medical history she had untreated dyslipidemia (triglyceride=400) and there was positive familial history for CAD (her father had myocardial infarction in 47 years old). She never used alcohol, cigarette and opium. She did not have any safe contraception. She did not use any special drug except proton pump inhibitor and Aluminum mgs.

PH/E: (at hospital admission)
She was in tubed. her GCS(T)=3/10
BP=95/65 (without inotrope) PR=105 T=37 RR=14 assist by ventilator
O2Sat=99%

Her pupils were reactive. redor was negative. lung examination was normal. heart examination was regular sinus tachycardia. abdominal examination was not reliable. In extremity neurologic exam there were diffuse weakness in extremity and other examination was normal.

Clinical course:

She had admitted in ICU with GCS=3/10 and BP=95/65 and mild diffuse ST segment depression and sinus tachycardia in first electrocardiogram. According to neurologic exam after brain CT and brain MRI hypoxic encephalopathy was detected. Because she

was in fertility age and she had abdominal pain we found vaginal bleeding when Foley catheter was fixed for her and she did not have any safe contraception, her BHCG was checked and the result was positive. Then bed side sonography was done and free fluid was reported. Then choledocosyntesis was done. The reported result showed free fluid which was blood and patient had been referred for surgery. According to gynecology consult She had unilateral ectopic pregnancy and unilateral tubolectomy was done for her. At first serial lab test showed positive troponin that was guessed because of CPR. But through bed side echocardiography it was detected that the patient had regional wall motion, ejection fraction=40% and inferior and lateral hypokinesia .After serial ECG Q wave was found. The patient was observed about 3 weeks in ICU and finally she was ex tubed and out of bed .because of her Q wave , ST depression in ECG , reduced EF=40% with right wall motion regional abnormality ,positive troponin and recurrent epigastric pain she had undergone coronary angiography that was resulted 2 vessel disease , RCA was cut and 90% stenosis in mid part LAD .she under gone PCI on RCA and LAD ,after viability study secondary workup for hyper coagulopathy state and underline disorder which prone to thrombosis and CAD was done which all were negative. The only abnormality was elevated TG =510mg/dl. dual anti platelet and anti-lipid therapy was started for her.

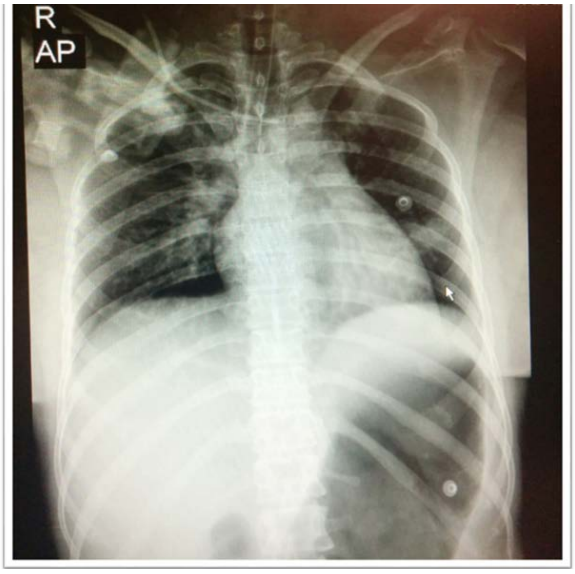

Figure 1: CXR of patient once admittion

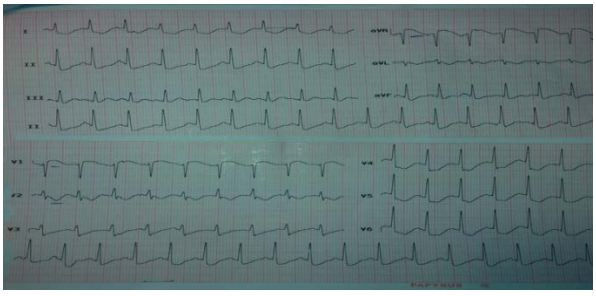

Figure 2: Electrocardiogram of patient once admission.

Discussion:

In our case we reported a 34 years-old female in the productive age who had ectopic pregnancy and coronary disease together. The interesting point in this case was that Myocardial infarction can occur in young female in pregnancy. Young women at an age when they may become pregnant, they are in an increasing number of risk factor for cardiovascular disease, particularly acute Myocardial infarction. acute Myocardial infarction during pregnancy remains rare and was estimated to occur in only 3 to 6 deliveries per 100000 in resent ESC guide line. Pregnancy related acute Myocardial infarction (PAMI) can occur at any stage of gestation (Regitz-Zagrosek, 2017) (2). The result of a case control study of Myocardial infarction in women below age 55 years' old that was based on 168 cases of acute Myocardial infarction and 251 hospital controls. Cigarette smoking was strongly related to Myocardial infarction, another risk factors were included diabetes, hyper tension and history of coronary heart diseases in more than one first degree relative. Relative risks were also elevated in women who gave birth to their first child earlier (below age 20 years) and in oral contraceptive users. (La Vecchia, Franceschi, DECARLI, Pampallona, & Tognoni, 1987) (3). Familial history of coronary arterial diseases was found in 18 percent of patients in a study. In a study done in London, the role of familial history was found in 39 percent of patient's lipid abnormality, especially raised triglyceride and low high density lipid were found in around 50 percent of patients. Also diabetes, hyper tension and dyslipidemia were found as important risk factors in young women with acute Myocardial infarction. (Bhardwaj, Kandoria, & Sharma, 2014) (4). An article provides a global estimate of the incidence, mortality rate and cause fatality rate of pregnancy associated Myocardial infarction. The research regarding this population is needed especially given rising maternal age and the increasing prevalence of cardiovascular risk factors. (Gibson et al., 2017)(5). pregnancy is considered a cardiovascular stress test that can unmask underlying cardiovascular diseases through progressive hemodynamic changes which may lead to clinical decomposition and potentially life-threatening disease. While hyper tension, sepsis and hemorrhage remain the leading global causes of maternal death. cardiac disease has become the leading causes of maternal mortality in high income countries. In recent years and has gained increasing prevalence even in low and middle income countries. Myocardial infarction is a major cause of morbidity and mortality for pregnant women and understanding the interaction between morbidity and mortality as related to pregnancy is also critical to informing maternal health programs. Thirteen studies reported on the primary outcome of pregnancy-associated Myocardial infarction incidence, including a total cohort of 66470100 pregnancies the reported incidence of pregnancy-associated Myocardial infarction ranged from 0/6 to 7/6 per 100000 pregnancies. In studies conducted in the USA reported the highest incidence proportions of pregnancy-associated Myocardial infarction (4/87 per 100000 pregnancies), while studies done in Canada (1/15 per 100000 pregnancies) and Europe (0/84 per 100000 pregnancies) reported lowest proportions. In the studies examining cohort between 2000-2009 reported the highest overall incidence of pregnancy-associated Myocardial infarction (4/39 per

100000 pregnancies).one study determined an estimated pooled incidence of pregnancy-associated Myocardial infarction of 3/34 (2/09-4/58) per 100000 pregnancies. (Gibson et al., 2017) (5).

Conclusion:

we reported a 34 years-old female in the productive age who had ectopic pregnancy and coronary disease together. She presented with epigastric pain which was treated as a gastrointestinal upset. Although she was young but she had hyper dyslipidemia and positive familial history for CAD. The suspicion for Myocardial infarction should be increased in younger age with epigastric pain which is resistant to PPI. she had underline risk factors for CAD (6).

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