ORIGINAL RESEARCH PAPER

Medical Science

ACUTE CORONARY SYNDROME: CASE REPORT IN A YOUNG PATIENT.

KEY WORDS: acute coronary syndrome, hypercoagulability, genetics

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ABSTRACT

Objetive : To describe the probable cause of acute myocardial coronary syndrome in a young patient with no medical history and an adequate lifestyle. **Method:** A retrospective study was carried out, a clinical case of a young patient with no history and with an adequate lifestyle who was followed up for 2 years from 2020 to 2022 in cardiology and hematology outpatient Rclinics for hypercoagulability and genetic studies. **Results :** Genetic studies, hypercoagulability and immunological studies were negative. **Conclusion:** Possibly, over time, the patient will show a more florid symptomatology that could be associated with an immunological pathology such as SLE that explains the cause or has more resources, which will allow the pertinent study to be carried out to demonstrate the presence of genetic mutations related to thrombophilia

INTRODUCTION:

Acute coronary syndrome today has an incidence of close to 40,000 people a year, which means that in ecuador every 12 minutes an ecuadorian suffers a heart attack. There are several risk factors such as high blood pressure, diabetes, dyslipidemia and unhealthy habits. despite health policies aimed at reducing tobacco consumption, obesity, sedentary lifestyles alcohol consumption, it is estimated that by 2030 almost 23.6 million people could die from one of these conditions.

Taking this into account, you should always ask about your risk factors as well as the characteristics of perce pain. Another factor to take into account is the triggering factor, whether it is physical exertion or at rest, the time of duration, whether it is more or less than 20 minutes, the presentation if it is diffuse or if it changes with movement and position. It should always be related to the electrocardiographic results as well as the troponins. In this particular case, the coronary syndrome was triggered secondary to a thrombus developed on a ruptured atherosclerotic plaque that required angioplasty.

METHODOLOGY :

A retrospective study was carried out, a clinical case of a young patient with no history and with an adequate lifestyle who was followed up for 2 years from 2020 to 2022 in cardiology and hematology outpatient clinics for hypercoagulability and genetic studies.

Whose information is stored in the computer system of our hospital.

CASE REPORT: 26-year-old patient, lawyer, who has been a regular sportswoman for 2 years, with no personal or family pathological history such as sudden death or other cardiovascular factors of interest or consumption of illicit substances, alcohol or tobacco. who two years ago arrives at the emergency room of the military hospital. For chest pain as well as palpitations and anxiety crisis.

With apparent cause ingestion of paracetamol and caffeine (sinalgia forte 2 tablets) this secondary to headache prior to the aforementioned picture, who is assessed in the first instance by a psychiatrist who discharges and sends benzodiazepines. However, the symptoms persist, so he goes to the emergency room, where he is admitted again, in addition to presenting nausea and vomiting four times. Physical examination found: blood pressure 130/70 mm Hg; heart rate: 100 beats per minute, respiratory rate at 16 breaths per minute, sat 90% room air, due to the time and age of the patient, emergency catheterization is decided, the same one that is performed immediately, in which the anterior descent is found to be 100% occluded in the proximal third, through which a 0.014 guide rope is used. Therefore, angioplasty was performed with a 2.5 x 15 balloon plus placement of a 3.5 medicated stent with subsequent residual lesion of 0%, with timi III flow, after which he was transferred to the intensive care unit for 48 hours, during which time he remained hemodynamically stable as well as his subsequent transfer to the cardiology floor.

COMPLEMENTARY EXAMS:

EKG: st-segment elevation is evidente in V1 and V4 with mirror image in DII, DIII AND AVF , with hemoglobin values of 17.70, hematocrit at 49, the rest of the parameters within normal limits. blood chemistry altered only with lipid profile in LDL1 12 values, time of normal coagulation factors as well as troponins of 2855.00.
22/07/2020 echocardiogram ruling out acute myocarditis vs acute myocardial infarction with normal coronary arteries.

22/07/2020 ANA : NEGATIVE, CARDIOLIPIN AC IGM : NEGATIVE, BETA2 MICROGLOBULIN 1.51

C3 216, C4 16, CARDIOLIPIN IGG NEGATIVE, ANTI SM NEGATIVE, HETEROZYGOTE A/C FOR MTHFR SNP A1298C

HETEROZYGOTE 4G/5G FOR PAI-1 GENE

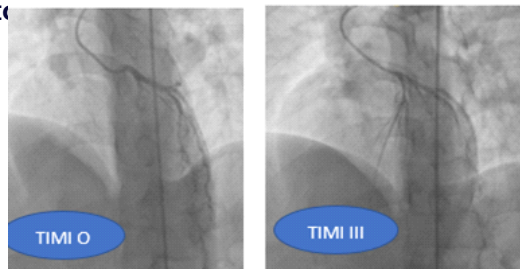
NEGATIVE IMMUNOLOGICS B2MG 1.15
10/27/2020 PROT C 112.26% PROTEINS 101.86%

03/29/2021 HOMOCYSTEINE 3.9 UMOL/L (0-15)

13/04/2022 ANA : NEGATIVE, CARDIOLIPIN AC IGM : NEGATIVE, BETA2 MICROGLOBULIN 1.49

C3 216, C4 16, CARDIOLIPIN IGG NEGATIVE, ANTI SM NEGATIVE

PI



DISCUSSION:

Acute coronary syndrome in young patients without cardiovascular risk factors is practically a rare and infrequent morbidity, unfortunately in this case, which was followed for 2 years (2020 to 2022), until now, no success has been obtained in all the tests that have been carried out, however, negative immunological titrations have been carried out on two occasions and even low-risk genetic alterations. To date we have no diagnosis of thrombophilia, we only have positive results of intermediate titer cardio lipin IGM. With respect to the patient, he has not referred precordia pain again, performs his normal activities and remains antiplatelet and anticoagulant based on rivaroxabán, It is expected to re-evaluate the immunological panel for possible lupus.

The limitations that have been had is to be able to carry out genetic tests related to thrombophilias that are not carried out in the country, however, the patient and family decide not to carry them out due to the high economic cost.

CONCLUSIONS:

With this case we want to arouse the interest of looking for all the clinical possibilities that could have contributed to the presentation of a heart attack, however we do not always have all the answers, despite the fact that this patient was operated on time in a specialty hospital.

Possibly, over time, the patient will show a more florid symptomatology that could be associated with an immunological pathology such as SLE that explains the cause or has more resources, which will allow the pertinent study to be carried out to demonstrate the presence of genetic mutations related to thrombophilia in the meantime we must focus on cardiovascular risk factors that can be controlled to prevent heart attack.

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