

# **Caracterización clínica, electrocardiografía y angiográfica de pacientes con infarto agudo del miocardio en el adulto joven en clínica de IV nivel de la ciudad de Barranquilla.**

## **Presenta:**

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## RESUMEN

La enfermedad cardiovascular en los pacientes jóvenes es una entidad que si bien es conocida no es ampliamente estudiada, ya que la población de riesgo suelen ser personas mayores de los 50 años de edad donde los factores de riesgo convencionales como la hipertensión, enfermedad aterosclerótica, diabetes mellitus tipo 2 son la primera relación causal, sin embargo los pacientes jóvenes también pueden compartir estos factores de riesgo, pero pueden existir otros que no son siempre estudiados, el motivo de este trabajo es caracterizar la población de estudio tratando de encontrar los factores de riesgo no convencionales en esta población. **Métodos y resultados:** Estudio observacional-descriptivo, retrospectivo de corte transversal, se evaluaron pacientes que ingresaron al servicio de hemodinamia, con diagnóstico de infarto agudo de miocardio jóvenes (< 40 años) que cumplieran la definición de infarto agudo del miocardio, el universo fue de 2808 pacientes de los cuales 41 cumplieron los criterios de inclusión. La población estuvo distribuida entre hombres (85%) y mujeres (15%), electrocardiográficamente se encontró que el infarto agudo del miocardio sin elevación del segmento ST fue el patrón más frecuente en la población estudiada (63%), desde el punto de vista ecocardiográfico la alteraciones segmentaria más frecuente fue el compromiso de 6 segmentos parietales, al momento de evaluar angiográficamente las lesiones, la arteria descendente anterior como la arteria más comprometida (ADA) en el 47.3% de los casos, seguida de la arteria circunfleja (ACX) en el 18%, se pudo caracterizar que las lesiones frecuentemente encontrados eran en la porción proximal de los vasos, lo cual fue estadísticamente significativo (P-valor 0.024). La mayoría de los pacientes tenían 1 o más factores de riesgo cardiovascular atribuibles, los factores de riesgo más comúnmente asociados a los infartos en los pacientes jóvenes fueron la hipertensión arterial (63.4%), hipercolesterolemia (56.1%), teniendo en cuenta este factor de riesgo en particular los niveles de colesterol LDL mayor de 100 mg/dL fueron asociados a más pacientes con eventos coronarios agudos, los niveles de triglicéridos mayores de 150 mg/dL también se asociaron a mayor probabilidad de presentar un evento coronario agudo en esta población joven. El hábito tabáquico

(26.8%), diabetes mellitus tipo 2 (24.3%) y uso de sustancias recreativas en el (21.9%), otros factores de riesgo como enfermedades reumatológicas, infecciosas y lipoproteína (a) y homocisteinemia fueron estudiados, pero no estuvieron presentes al momento de la caracterización de la población, el 36% de la población fue intervenida mediante ICP más implante de stent coronario, en una menor proporción necesitaron de ICP e implante de stent mediante IVUS (9.76%), de los 41 pacientes que cumplieron los criterios de inclusión solamente 14 necesitaron de DAPT ( doble terapia antiagregante plaquetaria). **Conclusión:** La población estudiada menor de 40 años que cumplía la cuarta definición de infarto está caracterizada por la presencia de los factores de riesgo convencional, sin embargo se encontraron factores de riesgo como el uso de sustancias recreativas que también se asocian a infarto en esta población, otros factores de riesgo menos frecuente, emergentes deben ser estudiados para relacionarlos con la etiología del IAM en los pacientes que no tengan un factor de riesgo aparente, angiográficamente es frecuente la lesión de la arteria coronaria descendente anterior y más una su porción proximal, lo que requirió tratamiento percutáneo mediante implante de stent, requiriendo así doble antiagregación plaquetaria en una porción de la población estudiada, pero llama la atención que el restante del grupo estudiado quienes no requirió implante stent ni doble antiagregación lo cual hace pensar en la causa no aterotrombótica que generaron isquemia y los factores de riesgo no convencionales probablemente asociados que deben ser indagados.

**Palabras clave:** infarto agudo del miocardio, síndrome coronario agudo, hipertensión arterial, pacientes jóvenes, diabetes, hipercolesterolemia, abuso de sustancias, lipoproteína (a), homocisteinemia.

## ABSTRACT

Cardiovascular disease in young patients is an entity that although it is known, it is not widely studied, since the risk population is usually people over 50 years of age where conventional risk factors such as hypertension, atherosclerotic disease, type 2 diabetes mellitus are the first causal relationship, however young patients may also share these risk factors, but there may be others that are not always studied, the reason for this work is to characterize the study population trying to find non-conventional risk factors in this population. **Methods and results:** Observational-descriptive, retrospective, cross-sectional study, patients who entered the haemodynamics service with a diagnosis of acute myocardial infarction were evaluated, young (< 40 years) who met the definition of acute myocardial infarction, the universe was 2808 patients of which 41 met the inclusion criteria. The population was distributed between men (85%) and women (15%), electrocardiographically it was found that the acute myocardial infarction without ST segment elevation was the most frequent pattern in the population studied (63%), from the echocardiographic point of view the most frequent segmental alterations were the involvement of 6 parietal segments, at the time of angiographic evaluation of the lesions, the anterior descending artery as the most involved artery (ADA) in 47.3% of the cases, followed by the circumflex artery (ACX) in 18%, it could be characterized that the lesions frequently found were in the proximal portion of the vessels, which was statistically significant (P-value 0.024). Most patients had 1 or more attributable cardiovascular risk factors, the risk factors most commonly associated with infarctions in young patients were arterial hypertension (63.4%), hypercholesterolemia (56.1%), taking into account this risk factor in particular, LDL cholesterol levels greater than 100 mg/dL were associated with more patients with acute coronary events, triglyceride levels greater than 150 mg/dL were also associated with a higher probability of presenting an acute coronary event in this young population. Smoking (26.8%), type 2 diabetes mellitus (24.3%) and recreational substance use in (21.9%), other risk factors such as rheumatologic,

infectious diseases and lipoprotein (a) and homocysteinemia were studied, but were not present at the time of characterization of the population, 36% of the population underwent PCI plus coronary stent implantation, a smaller proportion needed PCI and stent implantation by IVUS (9.76%), of the 41 patients who met the inclusion criteria only 14 needed DAPT (dual antiplatelet therapy). **Conclusion:** The studied population under 40 years of age that met the fourth definition of infarction is characterized by the presence of conventional risk factors, however risk factors such as recreational substance use were found that are also associated with infarction in this population, other less frequent, emerging risk factors should be studied to relate them with the etiology of AMI in patients who do not have an apparent risk factor, angiographically, the lesion of the anterior descending coronary artery and more so its proximal portion is frequent, which required percutaneous treatment by means of stent implantation, thus requiring double antiplatelet therapy in a portion of the population studied, but it is striking that the rest of the group studied did not require stent implantation or double antiplatelet therapy, which suggests a non-atherothrombotic cause that generated ischemia and the non-conventional risk factors probably associated that should be investigated.

**Key Words:** acute myocardial infarction, acute coronary syndrome, hypertension, young patients, diabetes, hypercholesterolemia, substance abuse, lipoprotein (a), homocysteinemia

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