LETTER TO THE EDITOR

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Is a New Cardiac Public Health Problem Rising: Jamaica?

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To the Editor,

As is the case worldwide, drug use among young people remains an important public health concern in our country. In this letter, we wish to highlight the growing use of Jamaica, a type of synthetic cannabinoid that has recently become widespread among young men due to its relatively low cost. Alarmingly, we have observed serious cardiovascular complications associated with its use.

Case 1: A 28-year-old male patient presented to the emergency department complaining of chest pain. The patient, who had ST elevation in the anterior leads on electrocardiogram (ECG), underwent emergency coronary angiography with a diagnosis of acute anterior myocardial infarction. A 4.5x24 mm drugeluting stent was directly implanted into a totally thrombosed lesion in the mid left anterior descending. The stent was post-dilated with a 5.0x12 non-compliant balloon. Following a successful primary percutaneous intervention, the patient was monitored in the intensive care unit. During the investigation of the aetiology, it was learned that he had used bonzai in the past year, but used Jamaica regularly for the last 6 months because it was cheaper. The patient, who continued treatment for a cardiac condition, was referred to the psychiatry department for addiction therapy.

Case 2: A 27-year-old male patient presented to the emergency department complaining of nausea, vomiting, and abdominal pain. Blood tests performed in the emergency department showed glucose was 758 mg/dL; urine ketones were negative. He was admitted to hospital with a new diagnosis of diabetes mellitus. During his hospitalisation, the patient had dyspnea and low oxygen saturation. Cardiological examination revealed sinus tachycardia on ECG, and echocardiography was performed, which showed left atrium: 4.1 cm, left ventricular end-diastolic circumferential: 6 cm, ejection fraction (EF) 20%, mitral regurgitation grade 2, and tricuspid regurgitation grade 3. Systolic pulmonary artery pressure was 45 mmHg. The patient's previous records showed that an echocardiogram performed two years earlier had revealed an EF of 65%. The patient was admitted to the intensive care unit with a new diagnosis of heart failure and was started on an angiotensinconverting enzyme inhibitor, sodium-glucose cotransporter 2 inhibitor, mineralocorticoid receptor antagonist, diuretic, ivabradine, and beta-blocker, after hypervolaemia resolved. Etiological investigation, in the young patient revealed that he had been using Jamaica regularly for the past 7 months. The patient was referred to the psychiatry department for addiction therapy.

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In the literature, we have not found any studies that attracted our attention regarding the cardiovascular side effects associated with acute or chronic use of the substance sold under the street name "Jamaica". We have observed that it is becoming increasingly prevalent in our country and that may contain many synthetic cannabinoid groups such as JWH, AM, and AB. The literature reports cardiovascular effects associated with the acute toxicity of other synthetic cannabinoids such as bonzai, spice, and K2, including acute myocardial infarction, atrial fibrillation, and ventricular arrhythmia cases associated with the acute toxicity of other synthetic cannabinoids such as bonzai, Spice, and K2 and our findings of no other cause in the aetiology of these two patients lead us to consider acute myocardial infarction and dilated cardiomyopathy associated with Jamaica in these two cases.^[1-5]

In conclusion, unexplained arrhythmias, myocardial infarction, or new-onset heart failure in young patients should prompt physicians to inquire not only about well-known synthetic cannabinoids but also other locally available variants such as Jamaica. Public health initiatives aimed at curbing synthetic cannabinoid use are urgently needed.

Footnotes

Authorship Contributions

Data Collection or Processing: E.P., E.E., B.D., H.K., Literature Search: E.P., H.K., Writing: E.P., E.E.

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