

Beaumont Health

Beaumont Health Scholarly Works and Archives

Conference Presentation Abstracts

Internal Medicine

5-13-2022

Cannabis and Acute Coronary Syndrome: A Case Report Exploring Potential Links

Fawaz Habba

Follow this and additional works at: https://scholarlyworks.beaumont.org/internal_medicine_confabstract



Part of the [Internal Medicine Commons](#)

ACP Michigan Chapter Meeting 2022

Resident Poster #23

Category: Clinical Vignette

Program: Beaumont Farmington Hills

Program Director: Mark Marrone, MD

Presenter: Fawaz Habba

Additional Authors: Michael Hoban, DO; Scott Searing, DO

Cannabis and Acute Coronary Syndrome: A Case Report Exploring Potential Links

Cannabis, or marijuana, is a commonly abused drug in the United States. Given its rapidly increasing use, it is paramount that physicians understand the risks of marijuana use that may impact patient safety, particularly its effects on the cardiovascular system.

A 43-year-old male with no significant past medical history presented to the emergency room with a chief complaint of chest pain. The patient reported intense substernal chest pain, which awakened him from sleep. He described the pain as a heavy sensation in his chest, rating the pain as 10 out of 10 in severity. The patient reported he had smoked marijuana prior to going to sleep. His social history was significant for smoking marijuana several times a day for the past fifteen years, occasional cigar smoking, and he was a social alcohol user. A twelve-lead electrocardiogram revealed ST-segment depression in leads V5 and V6 and T-wave inversion in leads III and aVF. Initial troponin was mildly elevated at 0.22 ng/mL. However, it continued to rise and ultimately peaked at 15.86 ng/mL. Urine toxicology panel was positive for cannabinoids only. The patient was treated as non-ST-elevation myocardial infarction and subsequently underwent coronary angiography and percutaneous coronary intervention. He was found to have 99% stenosis of the left circumflex artery. A drug-eluting stent was placed in the first OM as it was suspected to be the culprit lesion. He was initiated on dual-anti-platelet therapy consisting of Aspirin 81 mg daily and prasugrel 10 mg daily for an anticipated 12 months and discharged home.

There have been several seminal studies evaluating the impact of cannabis on cardiovascular health. Similarly, our patient had also been smoking marijuana shortly prior to the onset of his myocardial infarction. This case emphasizes that marijuana-induced acute coronary syndrome must be considered a cause of myocardial infarction, especially in young adults. Cannabis utilization continues to increase in both young and old adults. Since more people are consuming marijuana daily, it is imperative that we increase awareness about its detrimental effects.