

Acute myocardial infarction following anaphylaxis triggered by antibiotics

Gamze AYKAÇ^a, Amro Mohd HAFETH HAFETH^b, Alper TAŞKIN^c, Mustafa POLAT^d, Ali KARAKUŞ^e

Dear Editor,

Anaphylaxis can cause life-threatening airway obstruction, cardiovascular collapse, and multi-organ involvement, often requiring emergency treatment. Adrenaline is the first-line treatment. One rare but recognized complication is Kounis syndrome, where anaphylaxis or allergic reactions precipitate acute coronary syndromes. Here, we discuss a case of myocardial infarction (MI) that occurred three days after treatment for anaphylaxis.

A 59-year-old male was admitted to another facility with complaints of shortness of breath and throat swelling, consistent with angioedema, after taking antibiotics. He was diagnosed with anaphylaxis and treated with 0.5 mg intramuscular adrenaline, antihistamines, and hydration. The patient was discharged with oral cetirizine. Vital signs were normal, and he reported no other symptoms. An ECG revealed ST-segment depression in leads V3–V6, suggestive of acute myocardial infarction. Blood tests were all within normal limits, except for elevated troponin levels (0.39 ng/mL), which increased to 0.71 ng/mL, confirming the diagnosis of MI. Coronary angiography revealed 99% occlusion. The procedure was uneventful, and the patient remained hemodynamically stable throughout. During his ICU stay, the patient remained stable, and no further anaphylactic symptoms or complications were observed. The patient's chest pain resolved completely following the percutaneous coronary intervention (PCI), and his troponin levels normalized over the next few days. He was discharged with dual antiplatelet therapy and statins for secondary prevention.

This case illustrates the potential cardiac complications that may follow anaphylaxis, particularly in patients treated with adrenaline. In this case, the MI occurred three days after the initial allergic episode, possibly exacerbated by the combined effects of anaphylaxis and its treatment. This case highlights the need for awareness of myocardial infarction as a possible complication following anaphylaxis, especially in patients treated with adrenaline. Early recognition and timely coronary intervention are essential for improving patient outcomes in such cases.

Keywords: Myocardial infarction, anaphylaxis, antibiotics

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^aHatay Mustafa Kemal University, Faculty of Medicine, Department of Emergency Medicine Hatay, Türkiye e-posta: gamze.avkac01@gmail.com ORCID: 0009-0002-0462-2686

^bHatay Mustafa Kemal University, Faculty of Medicine, Department of Emergency Medicine Hatay, Türkiye e-posta: amr.zawate@hotmail.com ORCID: 0000-0002-7730-1886

^cHatay Mustafa Kemal University, Faculty of Medicine, Department of Emergency Medicine Hatay, Türkiye e-posta: alp01355@gmail.com ORCID: 0000-0002-6123-8771

^dHatay Mustafa Kemal University, Faculty of Medicine, Department of Emergency Medicine Hatay, Türkiye e-posta: mustafa.polat@mku.edu.tr ORCID: 0000-0002-6758-6187

^eHatay Mustafa Kemal University, Faculty of Medicine, Department of Emergency Medicine Hatay, Türkiye e-posta: drkarakus@yahoo.com ORCID: 0000-0003-1358-3201

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Sorumlu Yazar/Correspondence: Ali Karakuş e-posta: drkarakus@yahoo.com

