Kounis syndrome: case report

A 64-year-old man with underlying coronary disease developed Kounis syndrome after receiving amoxicillin prior to a dental procedure. The man developed chest discomfort and lost consciousness approximately 5 minutes after receiving oral amoxicillin 1g for tooth extraction. He regained consciousness in the emergency room, but developed diaphoresis and a generalised erythematous rash over his whole body. His BP was undetectable and he had sinus tachycardia. Anaphylactic shock from amoxicillin was diagnosed, and he gradually improved under hydrocortisone sodium succinate and dimetindene. Within 70 minutes of the initial episode, ECG showed T wave inversion, prompting transferral to the coronary care unit. Recurring ST depression in inferolateral and anterior leads and ST elevation in the aVL lead were noted on repeat ECG.

The man was managed with further hydrocortisone sodium succinate, aspirin, clopidogrel, heparin and nitrates. His pain gradually subsided and ECG findings normalised. Left main stem stenosis was disclosed the following day and a type II variant of Kounis syndrome was diagnosed. He underwent successful coronary artery bypass surgery. He was asymptomatic and well at last observation, having been advised to avoid amoxicillin and related compounds.

Author comment: "[T]he human heart can be the primary site and target of anaphylaxis resulting in the development of Kounis syndrome. . . In this patient the allergic reaction initially induced coronary spasm with shock which afterwards progressed to acute myocardial infarction."

Mazarakis A, et al. Kounis syndrome uncovers critical left main coronary disease: The question of administering epinephrine. International Journal of Cardiology 157: 43-45, No. 3, 14 Jun 2012. Available from: URL: http://dx.doi.org/10.1016/j.ijcard.2011.09.075 - Greece