

District III EMS
Quality & Improvement
“Case of the Month – November ‘04”

Tunnel vision in emergency medicine can be dangerous. We have all been led down the primrose path. Read this case and see what you think.

Any questions, feel free to contact me at Daniel.Wolfson@vtmednet.org

Chief Complaint: A Case of Dehydration?

Pre-hospital course: An ALS/BLS crew arrives to find a 41 yo male patient lying on the floor of his house in moderate distress. He was complaining of slight chest pain and shortness of breath. The patient says that he had been working outside all day cutting brush and had not eaten any lunch or had any fluids. He had an episode of diarrhea yesterday. He came inside and experienced acute onset of the above symptoms as well as nausea and one episode of vomiting. He also noted tingling in his hands and cramping in his legs. The patient was breathing rapidly with his eyes closed and was extremely diaphoretic. His wife had given him an aspirin.

On exam the patient’s vital signs were: Pulse 86, RR 28, BP 110/78. His lungs were clear. There was no sign of trauma. The patient’s past medical history was significant for borderline hypertension and borderline high cholesterol. Medications: None. Allergies: NKDA.

EMS placed the patient on 15 liters NRB oxygen and checked a finger stick glucose which was 56. The patient was given a tube of glucose which he vomited up en-route to the ER. The following monitor strip was obtained:

The radio room was contacted and told a 41 yo male pt was being brought in with acute N/V/D and dyspnea with a finger stick of 56 and diaphoresis. Upon arrival in the Emergency Department, EMS reported that the patient had been working outside all day and appeared dehydrated. He came into the house and noted acute onset of N/V, shortness of breath, and diaphoresis. His sugar was low and he was given glucose.

Emergency Department Course: Upon further questioning in the ED, the patient described associated chest pain as a chief complaint. The attached EKG was obtained. It was significant for an acute inferior posterior MI. Note the ST elevations in leads II, III, and aVF; and the deep ST depressions in V1-V3. The patient was transferred to the Cath lab where he was found to have a complete right coronary artery blockage that was resolved with placement of a stent.

Quality Improvement: This was a difficult case. The patient offered a history with multiple vague complaints. It was not recognized that this patient might be having an acute myocardial infarction. The patient's young age (41), history of having been working outside all day with little food or fluids, and associated symptoms of nausea and vomiting and slightly low blood sugar, confused the diagnosis and led the responding crew to believe that the patient was suffering from dehydration. Although the patient complained of chest pain, this was not communicated to the Emergency Department staff.

Take Home Message: This is the second case review of an inferior MI. They can be tricky as they often present with atypical symptoms, sometimes only nausea, vomiting, and diaphoresis. In this case, the patient presented with nausea and vomiting and diaphoresis and only mild chest pain. The elderly, diabetics, females, and younger patients often do not present with the classic story of crushing chest pain. Acute N/V and diaphoresis should always raise the suspicion of an inferior MI. This is a humbling job, keep an open mind to all possibilities, always assume the worst, and trust nothing.