

LETTER FROM THE EDITOR-IN-CHIEF

Evaluating Chest Pain in Urgent Care—" "Catch 22 and the Three Bears": Part 2



In my last column, I introduced a framework for evaluating chest pain in urgent care. In this month's column I discuss a risk and probability stratification that can assist in disposition decision-making. The following discussion considers existing evi-

dence, but there is no formal guideline for this process in the outpatient setting. Our goal is to make a risky scenario into something we can live with. This model is for risk-stratification purposes only and recognizes that the ultimate treatment and disposition decisions grow out of the patient–physician relationship and shared decision-making.

Although the clinical evidence is certainly imperfect, there is some support for discharge for a select group of patients. Strong evidence suggests that patients should be referred to an emergency department for additional evaluation and treatment if their chest pain is exertional, radiating to one or both arms, similar to previous cardiac chest pain, or associated with nausea, vomiting, or diaphoresis. Yet there is also good evidence that patients with chest pain that is stabbing, pleuritic, positional, and reproducible with palpation are at very low risk for acute coronary syndrome and most likely have chest wall pain instead.

Of course, other life-threatening causes of chest pain must be considered, including pulmonary embolus and aortic dissection. Established clinical decision tools for both can be applied in the urgent care setting. The three most common noncardiac causes of chest pain are gastroesophageal reflux disease, chest wall syndrome, and panic disorder. In the absence of ominous signs and symptoms and without abnormalities on an electrocardiogram (ECG), patients with classic symptoms of these disorders can be reasonably evaluated as outpatients with close follow-up. I use the term reasonably here because I cannot say without fail. If, despite "reasonable" care, a bad outcome ensues, there is no malpractice. If the clinician's documentation supports the decision-making, then the standard of care is met. The plaintiff's attorneys are very unlikely to pursue a case that looks like the one I have presented here. They may subpoena the records and they may create a lot of anxiety, but their entire case hinges on standard of care, and this closely mirrors the "reasonable care" standard.

The utility and meaning of point-of-care troponin testing are often misunderstood. Troponins are enzymes released by injured heart muscle and therefore are evidence of myocardial injury, not of coronary artery disease. Why does this matter? A patient with unstable angina may have no myocardial injury, and therefore findings for troponins will be negative. Yet unstable angina is an acute coronary syndrome, and patients with it should be referred for cardiac evaluation. When symptoms of unstable angina are not classic, a decision tool like a thrombolysis in myocardial infarction (TIMI) score can help stratify risk. A patient with a TIMI score of o or 1, normal ECG findings, and negative findings for troponin has a low risk of morbidity and mortality. Thus, it is reasonable to refer these patients for outpatient cardiology follow-up (within 24 to 48 hours). A clinician can further reduce risk in these patients through the judicious use of aspirin and β-blockers. In the evaluation of patients presenting with symptoms of a duration shorter than 8 hours, a single troponin test should never be used to rule out myocardial infarction, because the enzyme will not be reliably detectable until at least 6 hours after injury. The reliability of the findings of a single test is controversial even when symptoms have been present for 8 hours. However, when negative troponin findings are considered only for those patients at lowest risk (TIMI o or 1) and with normal ECG findings at least 8 hours after the onset of symptoms, it is reasonable to use the test. A combination of a troponin test with close follow-up, selective stress testing, and preventive pharmaceuticals is an evidence-based approach in the outpatient setting. Documentation of the patient's understanding and acceptance of the remaining risk further supports the approach.

Remember, the realistic goal is to minimize—not eliminate—risk. A reasonable standard of care is the definitive defense against medical malpractice complaints.

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