MedicalXpress

Emergency physician judgment on chest pain patients syncs with their outcomes

August 4 2009

Emergency physicians should trust their judgment when evaluating patients who report with chest pain symptoms, said a group of researchers led by Abhinav Chandra, M.D., at Duke University Medical Center.

Their research suggests that emergency physicians should counsel with other physicians against discharge when they feel strongly about a patient for whom there is no compelling data, other than our evaluation and judgment, Chandra said.

"There is evidence for emergency room physicians to trust their gut instinct when they have to make a quick decision about a potential heart patient, before lab results are even returned," said Chandra, director of acute care research and of the clinical evaluation unit in the Duke Division of Emergency Medicine. "Sometimes these patients could be better served by staying at the hospital and having more tests rather than being treated and released or discharged."

Chandra is lead author of a study on the topic published in the August issue of *Academic Emergency Medicine*.

Examining a robust database, Chandra and the research team found that for patients who lacked obvious initial evidence of a cardiac event, the emergency physicians' estimates of risk in the first 30 days correlated with their actual outcomes. The patients were from nine hospitals, including two non-teaching hospitals and a hospital in Singapore. The

data was collected between June 1999 and August 2001.

"Based on these data, I believe significant advances in both optimal patient care and cost-effective patient management can result from improved and increased communication between emergency room physicians and admitting physicians," Chandra said. "Our primary concern has to be a central focus on making the best possible decision about which patients should stay, and which should go home, and continually analyzing the factors that would lead to either approach.

"Sometimes the initial tests don't indicate anything serious, but I think, based on my experience and the sum of my judgment, there is something more," he said. "I was curious and wondered if I might be out of line or if there would be validity in this gut instinct in emergency physicians. I recalled the existing data from a large registry on coronary outcomes and learned that we could answer the question with evidence."

"I was surprised by the magnitude of the good instincts," Chandra said. "Of the 10,713 patients who met the criteria for our study, 604 were diagnosed with unstable angina. A total of 133, or 22 percent, had an adverse outcome in the first 30 days. I think that is pretty substantial." Adverse outcomes included death, heart attack (myocardial infarction), or the need to open blood vessels for blood flow (revascularization).

Likewise, Chandra and colleagues evaluated data on the 24 subjects who were discharged from the emergency department who had major adverse cardiac events. A total of 524 were discharged to home from the group assessed as high risk, and five had a major adverse outcome within 30 days.

"While only 1 percent had a bad outcome in the first 30 days, that is unsettling, because we see them and express concern about their risk level, yet so many are sent home. We don't know what influenced the

ultimate decision by the admitting or ER doctor to send the patients home, and that would be an important variable to study further."

Chandra says he hopes to share these findings with a wide group of physicians, "because we all have the same goal of keeping our patients healthy."

One way to formalize the value of the gut instinct about chest pain patients would be to introduce objective tools, like those that already exist for risk stratification of patients with pneumonia and for venous thrombus embolism. For example, the emergency physician could use an objective tool to categorize a patient with potential acute coronary syndrome and then add his/her judgment and determine the final probability of ACS, the authors noted.

The gut instinct is so important that many emergency medicine residency programs make developing sound medical judgment a formal goal. Chandra said that good independent judgment takes experience to attain, but thinks it begins to be very sound about 1-2 years after formal training ends.

"Emergency medicine is unique in that you have a very limited amount of time and data to make decisions," Chandra said. "Emergency physicians are very good at operating under these circumstances."

Chandra said the findings are important in today's health care climate. "When we examine cost and efficiency of health care, I think that emergency physicians can make an impact. If we release patients who end up needing further care, costs go up," he said. "Our decisions are better than we might give ourselves credit for."

Source: Duke University Medical Center (news : web)