

Chest pain severity, not obvious sign of MI

A new study published in the *Annals of Emergency Medicine* [1] showed that among patients presenting to an emergency room (ER) with potential ACS, those with severe chest pain were not more likely to have an acute MI or 30-day cardiovascular complications than those whose pain was less intense. Authors conclude that although it is important to relieve pain to make the patient comfortable, pain severity itself should not be a factor in evaluating patients' risk for acute coronary syndrome in terms of discharge decisions. Patient "history, physical, and classic cardiovascular risk factors . . . make more of a difference than something as subjective as pain score.

At triage, study patients rated their pain from 0, or "no pain," to 10, or "worst pain imaginable." Patients who rated their pain as 0--possibly because they were not currently in pain--were excluded.

The study included 1429 men and 1875 women with a mean age of 51 ± 12.6 years who were black (66%), white (27%), or another race (4%). Follow-up information was available for 93% of the patients.

By 30 days, 111 patients (3.2%) had an acute MI, 34 patients had died, and 105 patients had undergone revascularization. Severe pain--a score of 9 or 10--did not increase the risk of acute MI or 30-day composite cardiovascular outcome. After adjustment for age, sex, race, cardiac risk factors, medical history, thrombolysis in myocardial infarction (TIMI) score, pain duration, and mode of arrival at the ER, acute MI was related to TIMI score, male sex, and arrival by emergency medical services, but not to age, white race, pain duration more than one hour, or severe pain.

References

1. Edwards M, Chang AM, Matsuura AC, et al. Relationship between pain severity and outcomes in patients presenting with potential acute coronary syndromes. *Ann Emerg Med* 2011; DOI: 10.1016/j.annemergmed.2011.05.036. Available at: <http://www.annemergmed.com/home>.