

Improving the Evidence For Unstable Angina Guidelines

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BACKGROUND / RATIONALE:

This project aims to improve the evidence base for the AHCPR Unstable Angina Practice Guideline, which challenges clinicians to consider outpatient management for low-risk patients with symptoms suggestive of acute coronary syndrome (ACS).

OBJECTIVE(S):

Capitalizing on the resources of three clinical effectiveness trials of Emergency Department (ED) decision making, the Acute Cardiac Ischemia Time Insensitive Predictive Instrument (ACI-TIPI) Impact Trial, the Sestamibi Scan Clinical Trial, and the Unstable Angina Guideline Evaluation Trial, this project will determine whether agreement with guideline recommendations for triage is associated with improvements in mortality, diagnostic testing for cardiac ischemia, and subsequent short-term utilization (ED revisits, readmissions).

METHODS:

This analysis included 7466 adults age 30 or older that presented to the ED with symptoms of possible ACS over the period 1993-2001. We collected data by chart review and patient interviews in order to categorize patients into low- and intermediate-high risk groups based on the AHCPR guidelines. The associations between concordance with guideline-recommended triage and mortality and follow-up care were estimated, after adjusting for potentially confounding variables using a propensity score approach.

FINDINGS / RESULTS:

For low risk patients (n=1099), ED discharge did not result in a significantly increased need for emergency care or hospitalization during the follow-up period. Discharged patients, however, were less likely to receive outpatient follow-up (adjusted OR = 0.73, 95% CI = 0.54-0.98) or non-invasive testing for cardiac ischemia (adjusted OR = 0.22, 95% CI = 0.15-0.33). In intermediate-high risk patients (n=6367), admission to a telemetry or CCU bed was associated with improved outpatient follow-up (adjusted OR = 1.2, 95% CI = 1.0-1.4) and a decreased risk of ED revisits (adjusted OR = 0.81, 95% CI = 0.69-0.96).

IMPACT:

This research provides clinicians and policy makers with empiric evidence on the potential impact of implementing the AHCPR guideline for patients with symptoms of possible ACS. Specifically, the AHCPR guideline identifies low risk patients who can be discharged from the ED without experiencing an increased risk of adverse events. To reduce the risk of missed ACS, however, these patients should receive timely outpatient evaluation of cardiac ischemia. Guideline-concordant triage of intermediate-high risk patients is associated with more aggressive management of cardiac ischemia and a lower likelihood of ED revisits during follow-up.

PUBLICATIONS:

Conference Presentations / Abstracts

1. Katz DA, Aufderheide T, Bogner M, Rahko PR, Selker HP. Value of physician judgment in the interpretation of the Agency for Healthcare Research and Quality (AHRQ) Unstable Angina Guideline. Society of Medical Decision Making Annual Meeting. Chicago, IL 2003; 23: 558.
2. Katz DA, Aufderheide T, Bogner M, Rahko PR, Selker HP. Specialty of admitting physician and outcomes of care in hospitalized patients with possible acute cardiac ischemia. Society of General Internal Medicine Annual Meeting / Journal of General Internal Medicine. Vancouver, British Columbia, Canada 2003; 18: 286-287.