

Guidelines Underused in Patients Hospitalized with Unstable Angina

Shahi CN, Rathore SS, Wang Y, et al. Quality of care among elderly patients hospitalized with unstable angina. *Am Heart J* 2001;142:263-70.

Study Overview

Objective. To evaluate the quality of care provided to elderly patients hospitalized with unstable angina based on the guidelines for the diagnosis and management of unstable angina developed by the U.S. Agency for Healthcare Research and Quality (AHRQ) [1].

Design. Observational, cross-sectional study.

Setting and participants. The medical records of 1196 patients were reviewed. Participants were 65 years of age or older, Medicare-insured, and hospitalized with unstable angina (ruled out for acute myocardial infarction) at Connecticut hospitals between August and November 1995. Exclusion criteria included diagnosis of myocardial infarction within 48 hours of admission, terminal illness, and readmissions during the study interval.

Main outcome measures. Patients without therapeutic contraindications were evaluated for the use of 5 quality measures recommended by the AHRQ: electrocardiographic (ECG) examination within 20 minutes of admission, use of aspirin on admission, intravenous heparin on admission, achievement of therapeutic anticoagulation among patients provided heparin, and prescription of aspirin on discharge. "Ideal candidates" were clearly defined for each of the 5 quality measures and were based on the guidelines.

Main results. Participants had a mean age of 77.5 years; 55.7% were female and 92.1% were white. 49.6% (530/1068) of ideal candidates underwent ECG examination within 20 minutes of admission. After excluding patients with contraindications, aspirin was provided to 80.1% (736/919) of patients and intravenous heparin to 59.2% (493/832), but only 43.3% (162/374) achieved therapeutic anticoagulation. Aspirin was prescribed to 82.3% (580/705) of eligible patients at discharge. Performance on the 5 quality measures varied widely among hospitals.

Conclusion. AHRQ guideline-recommended risk stratification and therapeutic interventions are underused in elderly

patients hospitalized with unstable angina.

Commentary

Shahi et al demonstrate the difficulties confronted by the health care system in implementing clinical practice guidelines. Although they may have inevitable methodologic limitations, studies that evaluate the current use of the best available medical evidence are most needed. Many barriers to guideline implementation still exist throughout the health care delivery system. Although individual clinician practice is usually emphasized as the main target for change, redesign of clinic processes at the organizational level may be even more important and might result in more reliable and sustained compliance with clinical practice guidelines.

The poor adherence to widely accepted diagnostic and therapeutic interventions for the management of acute coronary syndromes, as demonstrated by this study, seems to be more often the rule rather than the exception. Although these studies cannot take into account patients' preferences and individual relative risk/benefit ratios, it is clear that the recommended interventions are underused. The gold standard for these interventions has been difficult to define, but it appears that even major teaching hospitals fall short. A study by Allison et al [2] evaluated quality of care for patients with acute myocardial infarction and found that among major teaching and nonteaching hospitals, the use of aspirin was 91.2% and 81.4%; use of angiotensin-converting enzyme inhibitors was 63.7% and 58%; and use of β blockers was 48.8% and 36.4%, respectively. There is still significant room for improvement.

Applications for Clinical Practice

Unstable angina is a common problem in the general population with an estimated incidence of 6/10,000 people. 5% to 10% of these patients will have a serious event within 7 days and 1-year mortality between 5% and 14%. Individual health care organizations should re-engineer clinical processes and team approaches to implement diagnostic and therapeutic guidelines in order to assure the best clinical outcome for patients with acute coronary syndromes [3]. Appropriate use of clinical practice guidelines, clinical judgment, and patient

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preferences should always guide individual clinical interventions and should provide the best care for our patients. Deviance from the guidelines should always be clearly rationalized and documented to provide quality data and assure better compliance evaluation.

– Review by Pedro J. Caraballo, MD

References

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