Complete Summary

GUIDELINE TITLE

Clinical policy: critical issues in the evaluation and management of patients presenting with syncope.

BIBLIOGRAPHIC SOURCE(S)

American College of Emergency Physicians (ACEP). Clinical policy: critical issues in the evaluation and management of patients presenting with syncope. Ann Emerg Med 2001 Jun;37(6):771-6. [27 references] PubMed

COMPLETE SUMMARY CONTENT

SCOPE
METHODOLOGY - including Rating Scheme and Cost Analysis
RECOMMENDATIONS
EVIDENCE SUPPORTING THE RECOMMENDATIONS
BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS
QUALIFYING STATEMENTS
IMPLEMENTATION OF THE GUIDELINE
INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES
IDENTIFYING INFORMATION AND AVAILABILITY

SCOPE

DISEASE/CONDITION(S)

Syncope

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management
Risk Assessment

CLINICAL SPECIALTY

Emergency Medicine
Family Practice
Internal Medicine

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

To address the following two critical questions:

- What data help to risk-stratify patients with syncope?
- Who should be admitted after a syncopal event?

TARGET POPULATION

Patients presenting with syncope in the emergency department (ED)

These guidelines are not intended for use in patients presenting with syncope in whom specific diagnoses are considered.

INTERVENTIONS AND PRACTICES CONSIDERED

1. Risk assessment, including assessment of historical data, physical examination data (vital signs, cardiopulmonary examination, head [tongue]), and diagnostic testing (electrocardiogram [ECG], cardiac monitoring, laboratory blood testing)
2. Hospital admission after syncopal event

MAJOR OUTCOMES CONSIDERED

- Predictive factors (historical data, physical examination data, and diagnostic testing data) for risk of adverse outcomes in patients with syncope
- Morbidity and mortality rates in patients with syncope

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

A MEDLINE search for English-language articles published between 1985 and March 1998 was performed using the key word, syncope, with a yield of 547 articles. Abstracts and articles were reviewed by subcommittee members, and 101 pertinent articles were selected. These were evaluated, and 29 articles addressing the questions considered in this document were chosen. Subcommittee members also supplied references from bibliographies of initially selected articles or from their own knowledge base.

NUMBER OF SOURCE DOCUMENTS

29 articles

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Strength of Evidence

Class I: Interventional studies including clinical trials, observational studies including prospective cohort studies, aggregate studies including meta-analyses of randomized clinical trials only.

Class II: Observational studies including retrospective cohort studies, case-controlled studies, aggregate studies including other meta-analyses.

Class III: Descriptive cross-sectional studies, observational reports including case series, case reports; consensual studies including published panel consensus by acknowledged groups of experts.

Strength of evidence Class I and II articles were rated on elements the committee believed were most important in creating a quality work. Class I and II articles with significant flaws or design bias were downgraded from 1 to 3 levels based on a set formula. Strength of evidence Class III articles were downgraded 1 level if they demonstrated significant flaws or bias. Articles down-graded below a Class III strength of evidence were given an "X" rating and were not used in formulating this policy.

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

All publications were stratified by at least 2 of the subcommittee members into 1 of 3 categories of strength of evidence. Some articles were downgraded 1 or more levels based on a standardized formula that considers the size of test population, methodology, validity of conclusions, and potential sources of bias.

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

This policy is a product of the American College of Emergency Physicians (ACEP) clinical policy development process, including expert review, and is based on the

existing literature; where literature was not available, consensus of emergency physicians was used.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Clinical findings and strength of recommendations regarding patient management were made according to the following criteria:

Strength of Recommendations

Level A recommendations. Generally accepted principles for patient management that reflect a high degree of clinical certainty (i.e., based on "strength of evidence Class I" or overwhelming evidence from "strength of evidence Class II" studies that directly address all the issues).

Level B recommendations. Recommendations for patient management that may identify a particular strategy or range of management strategies that reflect moderate clinical certainty (i.e., based on "strength of evidence Class II" studies that directly address the issue, decision analysis that directly addresses the issue, or strong consensus of "strength of evidence Class III" studies).

Level C recommendations. Other strategies for patient management based on preliminary, inconclusive, or conflicting evidence, or, in the absence of any published literature, based on panel consensus.

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Expert review comments were received from emergency physicians, members of the American College of Emergency Physicians' (ACEP´s) Pediatric Emergency Medicine Committee and Pediatric Section, physicians from other specialties, such as cardiologists, and specialty societies including members of the American Academy of Family Physicians, American Academy of Neurology, American Academy of Pediatrics, and the American College of Cardiology. Their responses were used to further refine and enhance this policy.

American College of Emergency Physicians (ACEP) Board of Directors approved the guideline recommendations on February 3, 2001.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Definitions for the strength of evidence (Class I-III) and strength of recommendations (Level A-C) are repeated at the end of the Major Recommendations.

I. What Data Help to Risk-stratify Patients with Syncope?

Patient Management Recommendations: Historical Data.

Level A recommendations. None specified.

Level B recommendations. (1) Patients older than 60 years with a history of cardiovascular disease should be considered to be at high risk of adverse outcome. (2) Patients younger than 45 years without cardiovascular disease or other risk factors should be considered at low risk of adverse outcome.

Level C recommendations. Patients with suspected reflex-mediated or vasovagal syncope should be considered at low risk of adverse outcome.

Patient Management Recommendations: Physical Examination Data.

Level A recommendations. None specified.

Level B recommendations. Patients with physical examination findings of congestive heart failure should be considered at higher risk of adverse outcome.

Level C recommendations. Patients with physical examination findings consistent with cardiac outflow obstruction should be considered at higher risk of adverse outcome.

Patient Management Recommendations: Diagnostic Testing Data.

Level A recommendations. None specified.

Level B recommendations. Obtain a standard 12-lead electrocardiogram (ECG) in patients with syncope when history and physical examination do not reveal a diagnosis.

Level C recommendations. In patients without a clear etiology of syncope after history and physical examination: Initiate cardiac monitoring.

II. Who Should be Admitted after a Syncopal Event?

Patient Management Recommendations: Admission after a Syncopal Event.

Level A recommendations. None specified.

Level B recommendations. Admit patients with syncope and any of the following:

1. A history of congestive heart failure or ventricular arrhythmias
2. Associated chest pain or other symptoms compatible with acute coronary syndrome
3. Evidence of significant congestive heart failure or valvular heart disease on physical examination
4. Electrocardiogram findings of ischemia, arrhythmia, prolonged QT interval, or bundle branch block

Level C recommendations. Consider admission for patients with syncope and any of the following:

5. Age older than 60 years
6. History of coronary artery disease or congenital heart disease
7. Family history of unexpected sudden death
8. Exertional syncope in younger patients without an obvious benign etiology for the syncope

Definitions:

Strength of Evidence

Class I: Interventional studies including clinical trials, observational studies including prospective cohort studies, aggregate studies including meta-analyses of randomized clinical trials only.

Class II: Observational studies including retrospective cohort studies, case-controlled studies, aggregate studies including other meta-analyses.

Class III: Descriptive cross-sectional studies, observational reports including case series, case reports; consensual studies including published panel consensus by acknowledged groups of experts.

Strength of Recommendations

Level A recommendations. Generally accepted principles for patient management that reflect a high degree of clinical certainty (i.e., based on "strength of evidence Class I" or overwhelming evidence from "strength of evidence Class II" studies that directly address all the issues).

Level B recommendations. Recommendations for patient management that may identify a particular strategy or range of management strategies that reflect moderate clinical certainty (i.e., based on "strength of evidence Class II" studies that directly address the issue, decision analysis that directly addresses the issue, or strong consensus of "strength of evidence Class III" studies).

Level C recommendations. Other strategies for patient management based on preliminary, inconclusive, or conflicting evidence, or, in the absence of any published literature, based on panel consensus.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate evaluation, risk-stratification, and management of patients with syncope

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

Recommendations offered in this policy are not intended to represent the only diagnostic and management options that the emergency physician should consider. The American College of Emergency Physicians (ACEP) clearly recognizes the importance of the individual clinician´s judgment. Rather they define for the clinician those strategies for which medical literature exists to provide strong support for their utility in answering the critical questions addressed in this policy.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2001

GUIDELINE DEVELOPER(S)

American College of Emergency Physicians - Medical Specialty Society

SOURCE(S) OF FUNDING

American College of Emergency Physicians

GUIDELINE COMMITTEE

American College of Emergency Physicians (ACEP) Clinical Policies Subcommittee on Syncope

ACEP Clinical Policies Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Members of the Clinical Policies Subcommittee on Syncope: Stephen A. Colucciello, MD (Chair 1998-2000); Barbara A. Murphy, MD (Chair 2000-2001); Thomas P. Martin, MD; Michael S. Radeos, MD

Members of the Clinical Policies Committee: Stephen V. Cantrill, MD (Chair 1996-2000); William C. Dalsey, MD (Chair 2000-2001); Melody Campbell, RN, MSN, CEN, CCRN (ENA Representative 1996-1998); Stephen A. Colucciello, MD; Wyatt W. Decker, MD; Francis M. Fesmire, MD; E. John Gallagher, MD; Steven A. Godwin, MD; John M. Howell, MD; Alan H. Itzkowitz, MD (EMRA Representative 2000-2001); Andy S. Jagoda, MD; Stephen Karas, Jr., MD; Edwin K. Kuffner, MD;

Thomas W. Lukens, MD, PhD; Peter J. Mariani, MD; Thomas P. Martin, MD; David L. Morgan, MD; Barbara A. Murphy, MD; Michael P. Pietrzak, MD; Daniel G. Sayers, MD; Scott M. Silvers, MD (EMRA Representative 1999-2000, Member 2000-2001); Bonnie Simmons, DO; Suzanne Wall, RNC, MS, CEN (ENA Representative 1999-2000); Robert L. Wears, MD, MS; George W. Molzen, MD (Board Liaison 1997-2000); Robert E. Suter, DO, MHA (Board Liaison 2000-2001); Rhonda Whitson, RHIA, Staff Liaison, Clinical Policies Committee and Subcommittees

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the American College of Emergency Physicians Web site.

Print copies: Available from the American College of Emergency Physicians, ACEP Customer Service Department, P.O. Box 619911, Dallas, TX 75261-9911, or call toll free (800) 798-1822, touch 6.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on January 29, 2003. The information was verified by the guideline developer on March 13, 2003.

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Date Modified: 11/15/2004