

SYNCOPE

Clinical Policy: Critical Issues in the Evaluation and Management of Adult Patients Presenting to the Emergency Department with Syncope
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What is syncope? Introduction

- Symptom complex
- Transient loss of consciousness and postural tone
- Spontaneous recovery
- It's not vertigo, seizures, coma, altered mentation



Methodology

- Inclusion criteria - search criteria
- Exclusion criteria
 - children
 - syncope secondary to another disease process
 - chest pain, seizures, headache, abdominal pain, dyspnea, hypotension, hemorrhage



1. What history and physical examination data help risk-stratify patients with syncope?

- Prodromal symptoms - duration
- Position changes or seated?
- Rate of recovery
- Movements during event*



Past medical history*

- Cardiac
 - CAD / CHF - Ejection fraction < 30%
 - Valvular heart disease
- Cardiac risk factors / Age
- Medications
 - QT period prolonging medications



Historical green lights

- Recurrent syncope +/-
- Psychologically noxious stimulus
- Reflex syncope



Physical exam red flags

- Maybe - orthostatic VS changes
- Maybe - blood pressure L & R arms
- Maybe - irregular pulse
- Signs of congestive heart failure
- Hypotension
- Significant murmur



What history and physical examination data help risk-stratify patients with syncope?

- **Level A:** Use history or physical examination findings consistent with heart failure to help identify patients at higher risk of adverse outcome
- **Level B**
 - Consider older age, structural heart disease, or a history of coronary artery disease as risk factors for adverse outcome.
 - Consider younger patients with syncope that is nonexertional, without history or signs of cardiovascular disease, a family history of sudden death, and without comorbidities to be at low low risk of adverse events.
- **Level C** - none



What diagnostic testing data help to risk-stratify patients with syncope?

- History and physical guide ancillary studies
- Routine laboratory work usually unrewarding*



Electrocardiography

- Electrocardiography - ECG almost all cases
 - PR interval
 - QT interval
 - Right ventricular strain patterns
 - Heart blocks



2. What diagnostic testing data help to risk-stratify patients with syncope?

- **Level A:** Obtain a standard 12-lead ECG in patients with syncope
- **Level B** - None
- **Level C**
 - Laboratory testing and advanced investigative testing such as echocardiography or cranial CT scanning need not be routinely performed unless guided by the specific findings in the history or physical examination



3. Who should be admitted after an episode of syncope of unclear cause?

- Does admission influence outcomes?
- Common sense
- Evidence



Who should be admitted after an episode of syncope of unclear cause?

- New approach - risk stratification
- Following history, physical examination, ECG
- Who needs further workup?
 - Inpatient or observation unit?
- Moving away from specific diagnostic assignment....



Low Risk Group

- Age < 50 years*
- No history of cardiovascular disease
- Symptoms of reflex or neurally-mediated syncope
- Normal cardiovascular examination
- Normal ECG findings



High Risk Group

- Chest pain suggestive ACS
- History or signs of congestive heart failure
- History of moderate / severe valvular disease
- ECG abnormalities
 - ischemic changes, prolonged QT (>500 ms)
 - complete heart block, brady or tachy rhythms



Intermediate Risk Group

- Age ≥50 years
- History of CAD, CHF, MI
- Family history of unexplained sudden death
- Cardiac devices without evidence of dysfunction



San Francisco Syncope Rule

- Systolic BP < 90 mmHg at triage
- Shortness of Breath
- History Congestive Heart Failure
- Abnormal ECG
- Hematocrit < 30%

If any positive, then at high risk for serious outcome
If all negative, then at low risk for serious outcome



Who should be admitted after an episode of syncope of unclear cause?

- Level A- none specified
- Level B
 - Admit patients with syncope and evidence of heart failure or structural heart disease
 - Admit patients with syncope and other factors that lead to stratification as high-risk for adverse outcome (older age / Comorbidities, Abnormal ECG*, HCT < 30, History of heart failure or CAD)
- Level C- none specified

*ECG - acute ischemia, dysrhythmias, or significant conduction abnormalities

