

## Syncope in older adults

### Key Points

- Thirty five percent of older adults 65 years or older experiences a syncope every year and the number increases to 45% for those 85 years or older.
- Syncope is one of the most common causes of emergency visits by an older adult.

### Overview

#### Definition

- An abrupt and transient loss of consciousness associated with absence of postural tone, followed by complete and usually rapid spontaneous recovery.
  - Often benign and self-limited
  - May indicate multiple underlying disease process

#### Causes

- Reflex (neurally mediate)
  - Vasovagal, cough, postprandial, post-exercise
- Orthostatic hypotension
  - Dehydration is often a reversible cause of orthostatic hypotension in older adults, especially in those with dementia
- Cardiovascular
  - Arrhythmia, bradycardia, tachycardia
  - Prescription medications are common causes of cardiovascular syncope in older patients
- Structural
  - Valvular heart disease, pulmonary embolus

#### Risk Factors due to old age

- Advancing Age
  - Decreased elasticity of great vessels and heart
  - Loss of pace-maker cells
  - Decreased responsiveness to baroreceptors and chemoreceptors
  - Slower reflex due to decreased adrenergic receptor stimulation
- Polypharmacy
  - Drug-drug interaction and adverse drug reactions

### **Assessment**

- History and physical examination remains the main key to narrow down causes
  - History of valvular heart disease indicating structural cause
  - After certain situation, e.g., defecation may indicate vasovagal
- EKG, 24-hour holter monitoring or 30-day loop recorder
- Electrophysiologic studies
- Echocardiogram
- Cardiac stress test
- Carotid Doppler ultrasonography
- CT scan of the brain
- EEG
- Tilt-table test
- Orthostatic vitals
- Laboratory testing: basic metabolic panel, complete blood count, blood sugar
- Psychiatric evaluation when no other causes established

### **Diagnosis**

- Based on results as described
- Ruling out differential diagnosis: stroke, transient ischemic attack (TIA), seizure, hypoglycemia, benign positional vertigo (BPPV)

### **Intervention**

- Intervention: life style change with well hydration
- Medication change if appropriate
- Cardiac intervention when appropriate
- Treat any other underlying cause

### **Important Point**

- It is recommended that both assessment/evaluation and intervention be modified for frail elderly based on prognosis and expectations of benefit
- Goals of care discussion is recommended prior to making any decision in the frail elderly

## References

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