Diagnosing the Cause of Syncope Following a Verified Syncopal Event

History, physical examination, electrocardiography

- **Diagnostic**
  - Such as: polypharmacy in older patients, vasovagal syncope, situational syncope, and orthostatic hypotension
  - **Treat**

- **Suggestive**
  - Such as: aortic stenosis, pulmonary embolism, neurologic symptoms, or family history of syncope or sudden death
  - Obtain specific testing.
  - Such as: echocardiography, lung scan, computed tomography, cardiac catheterization, or electroencephalography

  - **Positive**
  - **Treat**

  - **Negative**
  - **Unexplained syncope**

  - **Known or suspected heart disease (abnormal electrocardiogram, exertional symptoms, or sudden syncope)**
  - **Age > 60 years or abnormal carotid massage)**

    - Echocardiography, exercise treadmill, Holter monitor, or inpatient telemetry

      - **Positive**
      - **Treat or refer.**

      - **Negative**
      - **Stop work-up for arrhythmia.**

      - **Nondiagnostic for arrhythmia**
      - **Normal sinus rhythm with symptoms**
      - **Arrhythmia with symptoms**
      - **Treat or refer.**
      - **Consider electrophysiologic studies.**

      - **Negative**
      - **Stop work-up for arrhythmia.**

    - **Frequent syncope**
      - **Loop monitor, head-up tilt-table test, psychiatric evaluation**
    - **Infrequent syncope**
      - **Head-up tilt-table test, psychiatric evaluation**
    - **First syncopal episode**
      - **Stop work-up.**

- **Unexplained syncope**

  - **Suggestive**
    - Such as: aortic stenosis, pulmonary embolism, neurologic symptoms, or family history of syncope or sudden death
  - **Diagnostic**
    - Such as: polypharmacy in older patients, vasovagal syncope, situational syncope, and orthostatic hypotension

  - **Negative**
  - **Positive**

  - **Obtain specific testing.**
  - Such as: echocardiography, lung scan, computed tomography, cardiac catheterization, or electroencephalography

- **Stop work-up.**

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**Figure 1.** Algorithm for the diagnosis of syncope.


*—Coronary artery disease, congestive heart failure, valvular heart disease, cardiomyopathy, and congenital heart disease.
†—May be performed in an office setting only in the absence of bruits, ventricular tachycardia, recent stroke, or recent myocardial infarction. Carotid hypersensitivity should be diagnosed only if clinical history is suggestive and massage is diagnostically positive.