Evidence-Based Clinical Pathway: Syncope Evaluation

Prepared by: Porter M, Gentges J

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Primary Sources: 1. Huff JS, Decker WW, Quinn JV, et al. American College of Emergency Physicians. Clinical policy: critical issues in the evaluation and management of adult patients presenting to the emergency department with syncope. *Ann Emerg Med.* 2007;49:431-444. **(Systematic review)** 2. Soteriades ES, Evans JC, Larson MG, et al. National Heart, Lung, and Blood Institute Framingham Heart Study. Incidence and prognosis of syncope. *N Engl J Med*. 2002;347(12):878-885. 3. Tainter C. Current Guidelines for Diagnosis and Management of Syncope in the Emergency Department. EM Practice Guidelines Update. 2010;2(12):1-9.

Pathway applicability
Patients presenting with sudden, transient loss of consciousness to the ED

Laboratory/Ancillary Evaluation

- CBC, FSBS, UCG, EKG
- BMP or ISTAT G7 if history points toward possible electrolyte derangement (heat exhaustion, volume depletion from starvation/toxins/medications/shock)
- CT scan not indicated in routine syncope

Is there evidence suggesting seizure? (Table 1) — Yes → **Neurologic Evaluation**

No

Is there evidence suggesting cardiac etiology? (Table 2) — Yes → **Inpatient Evaluation**

No

Are there risk factors for short term adverse events? (Table 4) — Yes → **Inpatient Evaluation**

No

Outpatient followup appropriate in patients with probable benign etiology (Table 5), a safe social environment, and an outpatient physician

Table 1: Evidence suggesting seizure

- Neurologic Aura
- Tonic clonic movements for > 15-30 sec
- Tongue biting
- Incontinence
- Post event confusion/lethargy

Table 2: Evidence suggesting cardiac etiology

- Concerning ECG (See Table 3)
- Exertional or supine occurrence
- Family history of sudden cardiac death
- Absence of prodrome
- Palpitations or chest pain
- New murmur

Table 3: Concerning EKG findings

- Arrhythmia
- Ischemia
- Pre-excitation
- Brugada syndrome
- Hypertrophic obstructive cardiomyopathy
- Corrected QT interval > 500 ms

Table 4: Risk factors for short term adverse events

- Abnormal EKG
- Hematocrit < 30
- History of heart failure, CAD, or structural heart disease
- Age 65 or greater, or patients with associated comorbidities

Table 5: Findings suggesting a benign etiology

- Noxious stimulus (psychogenic origin)
- Positional (orthostatic) history
- History of prolonged period of standing
- Changed or new antihypertensive medication use
- Sterotyped situation (micturation/defecation)
- Response to carotid massage