

MNEMONIC FOR CAUSES OF TRANSIENT LOSS OF CONSCIOUSNESS

“HEAD, HEART, VESSELS”

CNS causes include HEAD:

Hypoxia

Epilepsy (not a true cause of syncope)

Anxiety and hyperventilation

Dysfunctional brain stem (basivertebral TIA)

Cardiac causes are HEART:

Heart attack (ACS)

Embolism (PE)

Aortic obstruction (IHSS, AS or myxoma)

Rhythm disturbance, ventricular

Tachycardia

Vascular causes are VESSELS:

Vasovagal (emotional reactions) or Valsalva (micturition, cough, straining etc.)

Ectopic (and other causes of hypovolemia)

Situational (orthostatic)

Subclavian steal

ENT (glossopharyngeal neuralgia)

Low systemic vascular resistance:

-Autonomic dysfunction: Addison's, diabetic vascular neuropathy

-Drugs such as CCBs, beta-blockers, anti-hypertensives

Sensitive carotid sinus

INVESTIGATIONS

Laboratory tests (not an exhaustive list- adjust to clinical picture)

- FBC
- U&Es
- Glucose
- Troponin
- Venous blood gas- normal H+ & lactate go against recent seizure
- Ca²⁺ & Mg²⁺
- CK (if suspected long lie)
- Coag (especially if on anti- coag medication)
- ?D-dimer
- ?Ethanol level

ECG

- ACS
- Arrhythmia
- Conduction blocks
- Long/ short QT
- RV infarction
- WPW
- Hypertrophy (HCM or LVH due to AS)

CT brain

Indicated if:

- suspected first seizure
- secondary head/C spine trauma sustained during the syncopal episode
- suspected TIA or stroke
- neurological deficit or ongoing altered conscious state / confusion
- sudden onset headache
- patient on warfarin

***N.B. see may not require emergent CT brain in ED- see SIGN Guidelines and discuss with ED senior**