# 21. Syncope Algorithm

This clinical pathway is intended to supplement, rather than substitute for, professional judgment and may be changed depending upon a patient's individual needs. Failure to comply with this pathway does not represent a breach of the standard of care.

#### History of Syncope

Syncope is a symptom complex that is composed of a **brief loss of consciousness** associated with an **inability to maintain postural tone** that "**spontaneously**" (i.e., no postictal period with a rapid recovery) and "**completely**" (no residual neurologic deficit) resolves **without medical intervention. Near-syncope** is defined as a patient almost losing consciousness, and it is approached in the same way as syncope.

Consider seizure - tongue biting, head turning during loss of consciousness, no recollection of abnormal behaviour, prolonged limb jerking (lasting minutes), incontinence postevent confusion, and prodromal aura.

No

- Check RBS If RBS < 3.3 mmol/L see 28. Hypoglycaemia Algorithm
- 12 lead ECG Look for evidence of ischemia/infarction, dysrhythmias, atrioventricular blocks, Brugada syndrome (RBBB with
  J-wave elevation of ≥ 2 mm), prolonged QT interval, ventricular pre-excitation, hypertrophic cardiomyopathy
- Consider dangerous causes of syncope

## Neurally mediated syncope

- Subarachnoid haemorrhage
- Seizure

## Orthostatic hypotension-mediated syncope

- Ectopic pregnancy
- Gastrointestinal haemorrhage
- Medication-induced orthostatic hypotension\*
- \* patients who may benefit from intervention.

### Cardiovascular-mediated syncope

- Dysrhythmias
- Acute coronary syndromes (rare < 2%)</li>
- Aortic dissection
- Pulmonary Embolism (rare < 1%)
- Patients with bradycardia\*

None of the above

#### The San Francisco Syncope Rule (SFSR) (available in MDCalc)

The SFSR uses five factors (CHESS predictors) to predict serious adverse outcomes at 7 or 30 days in patients presenting to the ED.

- 1. History of Congestive Heart Failure
- 2. Haematocrit < 30% (Hb < 10g/dL) (test if clinically indicated)
- 3. ECG abnormality (see above)
- 4. History of Shortness of breath
- 5. SBP < 90 mm Hg after arrival in the ED

SFSR is associated with a pooled negative predictive value of 97%, sensitivity of 87%, and negative LR of 0.28. Patients with negative SFSR scores had < 3% risk for serious outcomes.



