10. 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, post-event confusion, and prodromal aura.

Yes → **Go to 9. Seizures Algorithm**

↓ **No**

- **Check RBS** – If RBS < 3.3 mmol/L – **see 23. 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**
  - **Obstructive causes (pulmonary embolism, aortic dissection)**
  - **Subarachnoid haemorrhage**
  - **Infection/sepsis**
  - **Haemorrhage/hypovolemia e.g. gastrointestinal bleeding, ruptured ectopic pregnancy, ruptured abdominal aortic aneurysm**

↓ **None of the above**

The San Francisco Syncope Rule (SFSR).

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 **C**ongestive Heart Failure
2. **H**aematocrit **< 30% (H**b < 10g/dL**)** (test if clinically indicated)
3. **E**CG abnormality (see above)
4. History of **S**hortness of breath
5. **S**BP **< 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.

↓

Does the patient have ANY of the 5 SFSR predictors?

Yes → **Consult a Physician**

No → **Discharge**