1. Transient LOC

Excluding…

***Exclude* Transient LOC due to:**

- **Seizure** (i.e. Aura, Jerking **pre**-LOC/collapse, Tongue biting on lateral edge not tip, Post-ictal phase present) – if in doubt, it is safer to perform this Syncope assessment.
- **Head Injury** / Trauma (Causal)
- **Coma** / CVA

Syncope Definition

Transient Global Cerebral hypoperfusion
Rapid onset, short duration
Spontaneous and Complete recovery

Considering…

Neurally Mediated	Orthostatic Hypotension	Cardiovascular
Absence of Heart Disease	Absence of Heart Disease	Structural Heart Disease
Long Hx of Recurrent Syncope	After standing	Family Hx of Sudden Death
Trigger Present – pain, shock, heat, standing	Temporal Relationship with change in meds	*During* Exertion/Supine
Associated with Nausea or vomiting	Prolonged standing in crowded / hot place	Sudden palpations immediately followed by syncope
During/Post Eating meal	Autonomic Neuropathy (e.g. Parkinson's, diabetes)	Abnormal ECG
Neck Pressure / Stimulation	Standing after exertion	
After exertion		

2. Routine ED Assessment

- Continuous Cardiac **Monitoring** whilst in ED
- **History**: Age, Prodrome, Triggers, Associated Symptoms, Injuries, Previous Episodes, PMHx, FHx (see table to right)
- **PEx**: General exam and Postural & Bilateral BP, Carotid Sinus Massage (If not contraindicated)
- **ECG**
- **BSL**

Special Cases Only

- **bHCG** (Urine) in females
- **Only** if clinically suspect abnormality - EUC / Hb
- **Only** if Chest pain / ECG Changes – consider Troponin

Considering…

Dangerous Cause Confirmed / Suspected

Benign cause suspected, or
Cause unknown

Dangerous Causes Include

Cardiovascular:

- **Arrhythmia** (Tachy or brady)
- **Ischaemic** (<3% of all presenations)
- **Structural** (AS / Cardiomyopathy/ Tamponade

Neurological: (nb need return of full neurological function):

- **Subarachnoid Haemorrhage**
- **TIA** (involving Vertebrobasilar territory -> RAS)
- **Subclavian Steal** (stenosis of Subclavian artery)

Other:

- **Massive GI Bleed**
- **Shock** from other causes

Follow management guidelines of Specific Condition

3. Consideration of High Risk Criteria

Severe Structural or Coronary Heart Disease

- Heart Failure; Low LVEF; Previous MI

Clinical or ECG features suggesting Arrhythmia

- Syncope During Exertion or whilst Supine
- Palpitations at the time of Syncope
- Family History of Sudden (Cardiac) Death
- Non-Sustained VT
- Bifascicular Block (L/R BBB + Left ant/post Fascicular Block) *OR* Intraventricular Conduction abN with QRS duration >120ms
- Inadequate Sinus Brady or SA Block (without medications/ Physical Training)
- Pre-excited QRS Complex
- QT Interval short or long
- Brugada Pattern (RBBB with STE in V1-V3)
- Negative T Waves in Rt Precordial Leads, epsilon waves and Ventricular late potentials (suggestive of Rt Ventricular Cardiomyopathy)

Important Co-morbidities

- Severe Anaemia
- Electrolyte Disturbance
- Elderly
- And **Apply your Gestalt**!!!

4. Admit those with high risk criteria

No High Risk Factors -> Consider Discharge (after discussion with Senior Clinician)

- Education (Triggers, Prodrome, Physical Manoeuvres, Teds)
- Review Medications (in consultation with GP)
- Consider for Tilt Table Testing
- Consider referral / further testing via GP or neurology / cardiology

High Risk Factors -> Admit

- Admission / Intensive Investigation
- Cardiology / Special review
- Continued Telemetry
- Consideration of ECHO / EPS / Angio / EEG / CTB / Dopplers