

## Syncope/Presyncope in older patients - Clinical Guidelines

Reference no: CG-T/2024/001

### **Purpose**

To guide staff on the appropriate diagnostic pathway for older patients presenting with presyncope/syncope

### **Aim and Scope**

Applicable for all clinical areas in the Trust.

The aim is to ensure appropriate investigations are requested, avoid patients undergoing unnecessary investigations and facilitate the diagnostic process.

### **Guideline**

Syncope is defined as a transient loss of consciousness, characterised by unresponsiveness and loss of postural tone with spontaneous recovery.

#### **Neurogenic/Vasovagal/Situational syncope**

The majority of older people presenting with syncope will have a neurocardiogenic cause (60%).

The history and examination will lead to a diagnosis in approximately 60% of cases.

Features suggesting neurally mediated syncope include symptoms related to the upright position, especially on prolonged standing, after a meal or on head turning.

#### **Cardiogenic syncope**

Cardiac causes are suggested by evidence of structural heart disease, syncope on exertion or supine and preceded by palpitations.

ECG changes suggestive of cardiac causes are: bifascicular block, symptomatic sinus bradycardia, prolonged QT interval, intraventricular conduction defects, second degree heart block, AV node and SA node diseases.

Cardiac monitoring without these changes is unlikely to be diagnostic (<2%).

#### **Orthostatic(Postural) Hypotension**

Orthostatic hypotension is defined as at least 20 mmHg fall in systolic blood pressure (BP) and/or 10 mmHg fall in diastolic BP within 3 minutes of standing **WITH** symptoms.

Symptoms can include dizziness, vision changes, feeling faint, nauseated or a “coat hanger” ache (pain in the neck and shoulders in the distribution of a coat hanger shape).

The gold standard for assessing lying /standing blood pressure is to ensure the patient is lying flat for 5 minutes, then blood pressure readings to be taken at 1 minute and 3 minutes.

Ambulatory BP monitoring (ABPM) is helpful in assessing if the circadian BP profile is maintained as this is reversed in autonomic failure and to determine if there are any periods of significant hypotension or postprandial hypotension.

### **Carotid Sinus Hypersensitivity**

Carotid sinus hypersensitivity is diagnosed by carotid sinus massage, which should only be undertaken by trained health care professionals.

Neurocardiogenic syncope has different subtypes of abnormal cardiovascular responses and is diagnosed using tilt table testing.

In cases of recurrent syncope of unknown cause referral to cardiology or Dr Youde should be considered.

Following confirmation of Syncope ensure patient is not a “high risk” profession for example. pilot, driver, athlete or doctor.

Also give advice to the patient to **inform the DVLA** experiencing episodes of syncope.

### **Pharmacological treatments (discuss with specialist before prescribing)**

#### **Midodrine**

- This is the NICE preferred initial treatment.
- It is a 1-Alpha adrenergic receptor agonist and increases blood pressure via vasoconstriction.
  - Midodrine is a potent drug and it should be used with caution in patients that are suspected to have peripheral vascular disease as it can worsen ischemia of extremities by its mode of action.
  - It is contraindicated in those who are known to have cerebrovascular disease or ischemic heart disease.
- **Prescribing Midodrine:**
  - It can be gradually titrated up from 2.5mg TDS to 10mg TDS depends upon the symptoms and side effects.
  - Due to the risk of supine hypertension, (often dose dependent) the last dose should be given before the evening (roughly 1700h). Supine hypertension can be reduced by raising their head up, when the patient is supine. If patient suffers with supine hypertension then reduce the dose or stop the drug.
- **Side effects:** Nausea, vomiting, diarrhoea, dyspepsia, stomatitis, paraesthesia, headache, anxiety, confusion, urinary disorders - increase tone of internal sphincter of bladder muscle, reflex bradycardia through vagal stimulation, insomnia and restlessness.

#### **Fludrocortisone**

- Avoid using it if possible because it is not a licensed drug.
- It's mode of action promotes sodium reabsorption. It expands the circulating plasma volume thus increasing blood pressure.
  - It should be used with caution in patients with congestive cardiac failure as can worsen the condition.

- **Prescribing Fludrocortisone:**
  - The dose starts at 50 micrograms and can be titrated up to 300 microgram in 2-3 divided doses.
  - This drug should not be commenced during an acute infection and can have immunosuppressant features which can increased vulnerability to diseases such as shingles, measles, Tb.
  - Patients should be advised to carry a steroid treatment card and gradual withdrawal of fludrocortisone is required after prolonged use due to adrenal suppression.
  
- **Side effects:** Nausea, headache dyspepsia, acute pancreatitis, oesophageal ulceration and candidiasis, insomnia, myocardial rupture following recent myocardial infarction, hyperglycaemia, thromboembolism, vertebral and long bone fractures.

\*Both of these above drugs can be used in combination if required but guidance from a Specialist is advised.

### **Documentation Control**

<b>Reference Number</b> CG-T/2024/001	<b>Version:</b> 3		<b>Status</b> Final	
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	3	Feb 2024	Dr Muhammad Mazhar Saleem	Review
<b>Intended Recipients:</b> State who the Clinical Guideline is aimed at – staff groups etc.				
<b>Training and Dissemination:</b> How will you implement the Clinical Guideline, cascade the information and address training				
<b>Development of Guideline:</b> Dr Muhammad Mazhar Saleem <b>Job Title:</b> Consultant Geriatric Medicine RDH				
<b>Consultation with:</b> Dr Jane Youde , Consultant Geriatric Medicine RDH Dr N Ahmed and M Powell ,Department of Cardiology RDH UHDB NHS FT				
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<b>Contact for Review</b>			Dr Muhammad Mazhar Saleem	

## **References**

Guidelines on the management (Diagnosis and Treatment) of syncope Task force of Syncope-Update 2004 European Society of Cardiology Europace (2004); 6 :467-537

AHA/ACCF Scientific Statement on the Evaluation of Syncope Strickberger SA et al Circulation 2006; 113:316-32,

Transient loss of consciousness (blackouts) in over 16s NICE 2014  
QS71 <https://www.nice.org.uk/guidance/qs71>

2017 ACC/AHA/HRS Guideline for the Evaluation and Management of Patients With Syncope: Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Rhythm Society.

**Source:** Circulation; Aug 2017; vol. 136 (no. 5); p. e60

## **Appendices**

# Syncope TLOC Pathway

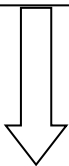
## SYNCOPE SYMPTOMS

LOC, Rapid onset, Short duration, Spontaneous recovery & Loss of postural tone

## Risk Stratifications

### Major (High) Risk Features

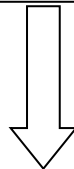
Syncope without any warning symptoms/sign  
Syncope with cardiac chest pain  
Syncope during exercise  
Syncope during sitting/supine  
Family history of SCD  
Persistent bradycardia/slow AF <40 bpm  
Sinus pauses >3 sec  
Unexplained SBP <90mmHg  
ECG changes consistent with acute ischemia/ACS  
Ventricular Tachycardia/SVT  
VF/Fast AF  
Complete heart block  
Mobitz type II 2nd and 3rd degree AV block  
Bifasicular and Trifasicular block  
LBBB with first degree AV Block  
QTc >460 ms in repeated



**Consider inpatient investigation for high risk patients depending upon nature and frequency of symptoms & signs.**

### Moderate Risk Features

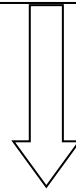
Injury sustained with syncopal episode  
Mobitz type 1 second degree heart block  
1st degree AV block with marked prolonged PR interval  
Asymptomatic bradycardia/slow AF 40-50 bpm  
Short QTc interval <350 ms  
Brugada pattern  
Pacemaker or ICD dysfunction  
Recurrent/Unexplained syncope



**Discuss outpatient investigation for moderate/low risk with the patient & consultant. If infrequent or initial episode with clear cause, then further investigations not normally required.**

### Low Risk Features

Reflex/vasovagal syncope  
Orthostatic hypotension  
Syncope with head rotation/pressure on carotid sinus (shaving, tight collar)  
During a meal/postprandial  
Syncope triggered by cough, defecation & micturition  
Absence of structural heart disease  
Normal blood glucose and ECG



# Guideline for the investigations of Syncope

**History**  
For seizure follow epilepsy guideline  
**Examination** (including Lying/Standing Blood Pressure and 12 lead ECG)

<b>Orthostatic Hypotension</b> Normal	<b>No Orthostatic Hypotension</b> Normal ECG
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**No Orthostatic Hypotension**  
**Abnormal ECG &**  
**Abnormal cardiac examination**

Review medications  
Lifestyle advice  
PH Leaflet  
Can consider 24 hr ABPM as OP if known hypertensive or suspected postprandial hypotension

Consider Vasovagal  
or Situational  
Syncope

Arrange Echocardiogram &  
Refer to cardiology team for  
advise (1-3 weeks duration of  
Holter monitor/Spider flash  
(depends upon the frequency  
of symptoms)

If symptoms persist,  
consider  
pharmacological  
treatment and can  
consider referral to  
specialist Syncope clinic

Recurrent syncope  
can refer to  
specialist Syncope  
clinic for further  
investigations

Recurrent Syncope and above  
results normal  
Refer to cardiology for  
consideration of Implantable  
Loop Recorder

Refer to Cardiology for further assessment if any of the following **red-flag** syncope symptoms present:  
Syncope **without** any symptom/sign  
Syncope with cardiac **chest pain**  
Syncope during **exercise**  
Syncope during **sitting/supine**  
Family history of **Sudden Cardiac Death**  
Refer to Cardiology for urgent pacing if any of the following ECG changes present:  
**CHB, Mobitz II AV block, trifascicular block, LBBB with first**

**Driving advice inform to DVLA**