

How to make a referral to Cardiology for a new diagnosis of syncope

The differential for an acute loss of consciousness can be broad. Patients who have high risk features should be sent to the ER. For high risk criteria please see the document below.

In patients with a **new diagnosis of low risk syncope or a remote syncopal episode who are appropriate for outpatient cardiology referral,** the following documents are requested.

- Clinical history
- Physical exam including listening for any heart murmurs and blood pressure measurement. Orthostatic vitals are preferred.
- Bloodwork including a CBC, renal function
- Baseline 12 lead ECG (12 lead ECG can be requested at Pulse Complete Cardiac Care)
- Holter monitor or other cardiac monitor if felt appropriate (Holter monitor can be requested at Pulse Complete Cardiac Care)

The patient will not be accepted for referral or booking of an appointment if information regarding their history of syncope is incomplete.

** Patients who have been **previously seen** by Cardiology and have a **known diagnosis** and are being sent for repeat reassessment do not necessarily need all of the above as part of the referral. They should have updated investigations as felt appropriate by the referring physician instead.**

If there are questions about investigations or management prior to making a referral, please consider contacting the RACE line if needed.

Considerations for Investigation of Patients with Syncope

Differential diagnosis for loss of consciousness can be broad.

Potential Causes of Loss of Consciousness				
Cardiac	Cardio-pulmonary	Orthostatic syncope	Reflex syncope	Non-syncope causes
Bradyarrhythmia (sinus node dysfunction or AV block)	Pulmonary embolism	Volume depletion (dehydration or anemia)	Vasovagal syncope	Seizures
Tachyarrhythmia -SVT is uncommon cause of syncope -VT or VF	Aortic dissection	Hypotension	Situational syncope (cough, swallowing, micturition, or defecation)	Intoxication
Severe aortic stenosis	Pulmonary arterial hypertension	Autonomic dysfunction	Carotid hypersensitivity	Metabolic causes (hypoglycemia, hypoxemia)
Hypertrophic cardiomyopathy				Psychogenic
Pericardial tamponade				
Cardiac mass				

Patients with recent syncope with high risk features should be directed to the nearest Emergency Department. High risk features include (but are not limited to):

- Sudden onset syncope with no prodrome
- Abnormal baseline ECG (abnormal axis, QRS wider than 120 ms, QTc > 480 ms)
- History of known heart disease or arrhythmia

If you have a high suspicion of cardiac syncope or there are other noncardiac but worrisome features about the syncopal episode, it is still reasonable to send the patient to the ER for emergent assessment.

You may consider the use of the Canadian Syncope Risk Score to help define low risk syncope vs high risk syncope.

Category	Points	Total score	Estimated risk of serious adverse event, § %	Risk category
Clinical evaluation				
Predisposition to vasovagal symptoms*	-1	-3	0.4	Very Low
History of heart disease†	1	-2	0.7	Very Low
Any systolic pressure reading < 90 or > 180 mm Hg‡	2	-1	1.2	Low
Investigations		0	1.9	Low
Elevated troponin level (> 99th percentile of normal population)	2	1	3.1	Medium
Abnormal QRS axis (< -30° or > 100°)	1	2	5.1	Medium
QRS duration > 130 ms	1	3	8.1	Medium
Corrected QT interval > 480 ms	2	4	12.9	High
Diagnosis in emergency department		5	19.7	High
Vasovagal syncope	-2	6	28.9	Very High
Cardiac syncope	2	7	40.3	Very High
Total score (-3 to 11)		8	52.8	Very High
		9	65.0	Very High
		10	75.5	Very High
		11	83.6	Very High

*Triggered by being in a warm crowded place, prolonged standing, fear, emotion or pain
 †Includes coronary or valvular heart disease, cardiomyopathy, congestive heart failure and non-sinus rhythm (electrocardiogram evidence during index visit or documented history of ventricular or atrial arrhythmias, or device implantation)
 ‡Includes blood pressure values from triage until disposition from the emergency department

§ Shrinkage-adjusted expected risk

Figure 2. Canadian Syncope Risk Score.

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For patients who have a likely non-cardiac cause of syncope you may consider referral to the most appropriate specialty (such as Internal Medicine, Geriatrics, Neurology etc).

If there are questions about further investigations or management strategies, or if you are uncertain if the patient warrants Cardiology assessment, please consider contacting the RACE line.