

## 暈厥 (Syncope)

• 定義：暫時性腦部血液灌流降低，引起的暫時性意識喪失合併姿態張力 (postural tone)的喪失。通常不需要藥物或是心律整流即可自動恢復。

• 機轉：暈厥的機轉依病態生理學，可區分為下列四大類

### 1. Reflex-mediated vasomotor instability

#### Vasovagal

Situational: micturition, cough, swallowing, defecation  
Carotid sinus syncope  
Neuralgia  
High altitude  
Psychiatric

### 2. Orthostatic hypotension

#### Drugs

Primary disorders of autonomic failures  
Secondary neurogenic causes

### 3. Neurological

Migraine  
TIA  
Seizure

### 4. Decreased cardiac output

#### (1) Obstruction to Flow

Obstruction to LV outflow: aortic stenosis, HOCM, MS, myxoma  
Obstruction to RV outflow: pulmonary stenosis, pulmonary HTN, Pulmonary embolism, myxoma

#### (2) Arrhythmia

Bradyarrhythmias  
Tachyarrhythmias

#### (3) Other heart disease

Pumping failure: MI, CAD  
Aortic dissection  
Cardiac tamponade

病史的詢問必須要知道病人是在何種情況之下發生暈厥，如情緒激動、看見可怕的事物（如流血）、疼痛、大小便、吞嚥食物、頸部或手部的運動、站立太久、洗熱水澡、到高山上、劇烈的咳嗽。發作的時候是否有隨伴症狀，如抽筋、頭痛、眩暈、單側手足無力、步態不穩、心悸、胸痛或胸悶不適。最常見的暈厥是 vasovagal syncope。

**TABLE 37-1 Causes of Syncope**

Vascular	Anatomical Vascular steal syndromes Orthostatic Autonomic insufficiency Idiopathic Volume depletion Drug- and alcohol-induced Reflex-mediated Carotid sinus hypersensitivity Neurally mediated syncope Glossopharyngeal syncope Situational (cough, sneeze, swallow, micturition, postprandial)
Cardiac	Anatomical Obstructive cardiac valvular disease Aortic dissection Atrial myxoma Pericardial disease, tamponade Hypertrophic obstructive cardiomyopathy Myocardial ischemia, infarction Pulmonary embolus Pulmonary hypertension Arrhythmias Bradyarrhythmias Sinus node dysfunction, bradycardia Atrioventricular block Tachyarrhythmias Supraventricular arrhythmias Ventricular arrhythmias (including long-QT and Brugada syndromes)
	Implanted pacemaker or implantable cardioverter-defibrillator malfunction
	Neurological and cerebrovascular* Arnold-Chiari malformation Migraine Seizure (partial complex, temporal lobe) Vertebrobasilar insufficiency/transient ischemic attack
	Metabolic* Drugs, alcohol Hyperventilation (hypocapnia) Hypoglycemia Hypoxemia
	Psychogenic syncope* Anxiety, panic disorder Somatization disorders
	Syncope of unknown origin

\* Disorders resembling syncope.

© Copyright 2008 by Saunders, an imprint of Elsevier Inc.



### Drugs

#### Diuretics

Alpha-adrenergic blocking drugs—terazosin (Hytrin), labetalol

Adrenergic neuron blocking drugs—guanethidine

Angiotensin-converting enzyme inhibitors

#### Antidepressants

Monoamine oxidase inhibitors

#### Alcohol

#### Diuretics

Ganglion-blocking drugs—hexamethonium, mecamylamine

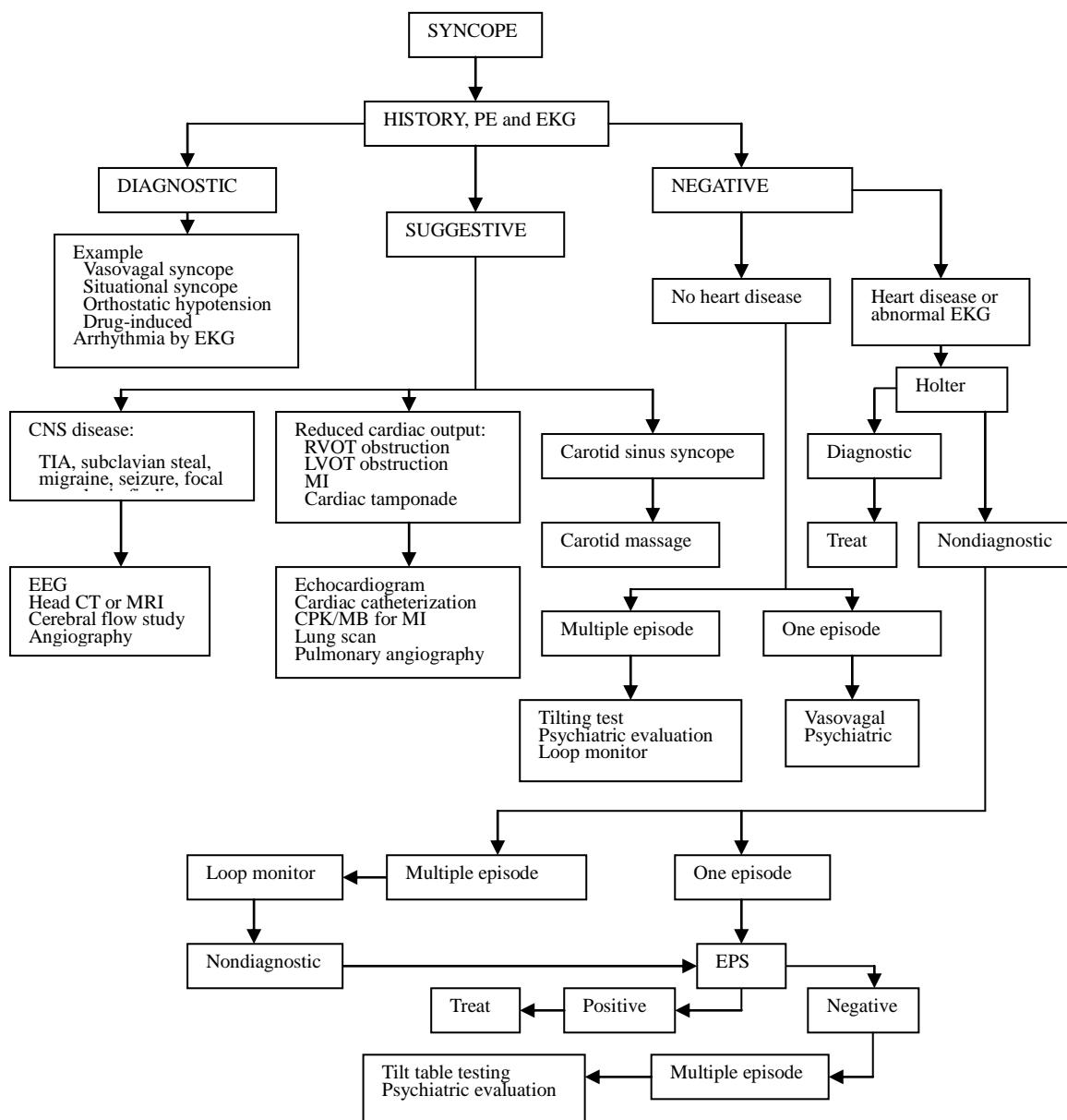
Tranquilizers—phenothiazines, barbiturates

Vasodilators—prazosin, hydralazine, calcium channel blockers

Centrally acting hypotensive drugs—methyldopa, clonidine

### 快速記憶法：

- S→Situational：如疼痛、大小便、吞嚥食物、頸部或手部的運動。
- Y→Vasovagal (把 Y 看成 V)：如站立太久、洗熱水澡、到高山上、劇烈的咳嗽。
- N→Neurological：如抽筋、頭痛。
- C→Cardiac：如 AMI、arrhythmia、cardiac tamponade。
- O→Orthostatic hypotension 要知道病人有無服用 vasodilator、diuretic。
- P→Psychological：emotion stress。
- E→Everything else：要知道病人有無服用 sedative、cocaine 或其他 elicit drugs。



### Reference

Ch37. Hypotension and syncope. Braunwald's HEART DISEASE 8<sup>th</sup> edition SAUNDERS 2008